DEPARTMENT OF ENERGY'S PROPOSED BUDGET FOR FISCAL YEAR 2000

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

OF THE

COMMITTEE ON COMMERCE

HOUSE OF REPRESENTATIVES

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WEDNESDAY, FEBRUARY 24, 1999

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON ENERGY AND POWER,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Stearns, Largent, Whitfield, Norwood, Rogan, Shimkus, Wilson, Pickering, Bryant, Ehrlich, Bliley (ex officio), Hall, McCarthy, Wynn, Strickland, and Klink.

Staff present: Kevin Cook, science advisor; Donn Salvosa, legislative clerk; Sue Sheridan, minority counsel, and Rick Kessler, minority professional staff.

Mr. BARTON. The subcommittee will come to order.

The Chair notes the presence of a quorum. We're going to go ahead and begin, and hopefully, we will have Mr. Hall or one of our minority members appear before our opening statements are concluded.

Today's hearing is on the Department of Energy's proposed budget for fiscal year 2000. This morning, we're going to examine the Department of Energy's budget request. The Department of Energy has a wide-ranging set of missions, from cleaning-up contaminated sites here in the United States, to ensuring the reliability of our nuclear arsenal, to conducting the research and development to bring our energy systems into the 21st century.

We have a number of energy issues that are important to the subcommittee. We need to see if the Department's proposed budget reflects the interests and priorities of the Congress and this particular subcommittee.

It's probably too much to expect that we're on identical courses, but it's reasonable to expect that we're on parallel tracks moving in the same directions. If our paths diverge significantly based on this hearing, then we'll have to take the appropriate steps in conjunction with the Department.

At the top of the subcommittee's priority list is nuclear waste. Spent fuel continues to accumulate at reactor sites around the country. Potential liability of the Federal Government continues to grow because of the Department's failure to take acceptance of that waste, and the Department still says that the earliest it can expect to open a permanent repository is the year 2010. That is simply unacceptable.

Just 2 weeks ago, we held a hearing on H.R. 45, legislation that would accelerate acceptance of spent fuel by establishing an interim storage facility. H.R. 45 would protect consumers by halting the diversion of ratepayer fees into other Federal programs, and it

would strengthen the permanent repository funding by ensuring a funding stream that matches project requirements.

To this date, the Department does not support H.R. 45, and the President has indicated that he will veto this legislation. The administration apparently takes this position because it believes that an interim storage will somehow jeopardize the Department's efforts on a permanent repository.

The Chair does not share the Clinton administration's view on that particular issue. I think it's time that we shed some light on the status of the permanent repository. Several of our witnesses 2 weeks ago expressed a lack of confidence whether the Department could really meet its promised 2010 date for opening the repository. It turns out that that lack of confidence appears to have been well placed.

It is the Chair's understanding that the Department's basic repository program faces serious funding shortfalls. At historical funding levels, and with the existing caps in place on the fees collected from the ratepayers, the Department of Energy will not have sufficient funds to open the repository in the year 2010. Meeting the 2010 schedule will require some real budget sleight of hand and some very rosy assumptions regarding future appropriations.

The DOE assumes that they will be able to tap into 100 percent of the fees collected from the rate payers, when in recent years they have been to access only approximately 15 percent of those fees. The Department also assumes a 150 increase in Defense contribution to the repository. I think this last assumption is not well-founded.

Based on the above information, it looks like the only thing that will be open in 2010 is, unfortunately, the wallet of the Federal taxpayer, since the Department will be paying out billions of dollars of damages since they haven't taken control of the repository.

I intend to explore this problem in more detail in the question and answer period, but I am troubled to learn that the repository program does not rest on a firm financial foundation. I am hoping to hear from Secretary Richardson in the near future, both on the funding problem, and to learn whether he has a constructive alternative to offer in lieu of H.R. 45.

I am also concerned about the approach to energy security, as reflected in the Department's budget request. In terms of real prices, oil is cheaper now than it was just before the oil crisis in the mid-1970's, and by some calculations, may be as cheap as the 1950's and early 1960's. The impact of these low prices may be of only academic interest to those here inside the Beltway; but to Mr. Hall and myself, who come from an oil-producing State, we know very well what impact these low prices have on the people in the oil-producing regions of the country.

Our reliance on cheap imported oil continues to grow, and we run the risk of losing some of our essential domestic capability to locate and develop new oil and gas resources. I am pleased that we are no longer selling off oil from the strategic petroleum reserve, and will be interested in what other measures the Department is taking to improve our energy security. I note that our lead witness did bring a handout on that problem, and I'll certainly take a serious look at that booklet.

The Department's budget request is in many ways a reflection of its ability to manage and oversee its programs. As Chairman of the Subcommittee on Oversight and Investigations in the last Congress, I reviewed several DOE programs in detail. I held hearings to review privatization contracting at Pit 9 and at Hanford. The delayed cleanup of spent nuclear fuel is stored dangerously close to the Columbia River at the Hannaford site. The Office of Environmental Management's failure to employ innovative environmental technologies which could have saved taxpayers $20 billion in cleanup costs.

We also looked at problems with performance-based incentive contracting and the Department's questionable funding of molten metal technology.

At each of these hearings, the subcommittee identified poor management by the Department that resulted in additional cost to the taxpayers. This year, as we review the DOE budget, we're going to be checking to see if the Department is making progress in those areas.

The committee has a number of other interests, from climate change, to nuclear energy, to environmental cleanup, and I am sure that other members will go into those subjects in some detail as they question our witnesses. We are anxious to learn more about the Department's activities. We welcome Dr. Moniz, who has appeared before my Oversight and Investigation Subcommittee on numerous occasions, and look forward to your testimony.

Not seeing Mr. Hall here yet, does Mr. Norwood request an opening statement? Okay. The Chair would recognize Mr. Norwood for a brief opening statement.

Mr. NORWOOD. Thank you very much, Mr. Chairman, for holding this hearing on the Department of Energy's budget proposal for fiscal year 2000.

As you know, Mr. Chairman, my district is contiguous to the Savannah River site, the most impressive field site in the DOE complex, and roughly 8,000 of my constituents currently work at that site, which has been a vital part of our community since World War II. I spent my first few years here in Congress fighting layoffs that were inevitable as the results of the end of the cold war; and now I want to make sure that the site is not only properly equipped to clean up after 40 years of defense buildup, but also is prepared for any new missions it may be qualified to handle.

On that note, I commend DOE for its wise selection of SRS for the majority of the plutonium distribution mission that was recently awarded. While I am pleased to see that DOE's environmental management budget for fiscal year 2000 looks good, and that the site should not anticipate any major layoffs, I will have some questions for Dr. Moniz regarding the Department's recent selection of a commercial reactor at the Tennessee Valley Authority to meet our country's future tritium supply.

My other concerns today, Mr. Chairman, will revolve around the ongoing saga of the Clinton administration's unwillingness to accept its responsibility to deal with our country's spent fuel problem, and a DOE budgetary proposal to eliminate funding for transmission and power purchases for the power-marketing administrations.

As you may know, the Southeastern Power Administration is located in my district, and provides power to many of my constituents. Eliminating appropriations for transmission and power purchases will thoroughly disrupt the power supply for many non-profit electric distributors. As a matter of fact, does DOE realize that its budget proposal could disrupt the power supply of preference customers in Secretary Richardson's home State of New Mexico who are served by its P.M.A.? I hope he's not planning on running for Senate any time soon. But, I guess he could always run for Senator Moynihan's seat.

I do appreciate you making the effort to be with us today, gentlemen, and I look forward to talking with you about these and many other issues.

Thank you very much, Mr. Chairman.

Mr. BARTON. I thank the gentleman from Georgia. Does the gentlelady from New Mexico wish to make a brief opening statement? Does the gentleman from Kentucky wish to make a brief opening statement? And I missed the gentleman from Tennessee, but we'll let the gentleman from Kentucky go, and then we'll get back to Mr. Bryant.

Mr. WHITFIELD. Thank you very much, Mr. Bryant. Mr. Chairman, I want to thank you for hosting our annual hearing on the fiscal year 2000 Department of Energy budget proposal. All of us look forward to hearing from Dr. Moniz about the Department's plans to help secure our Nation's energy future.

I have the privilege of representing the workers at the Paducah Gaseous Diffusion Plant, 1 of only 2 uranium enrichment plants in the country. With the privatization of the U.S. Enrichment Corporation, the former government corporation which operated the Paducah and Portsmouth plants, the future of those workers is quite uncertain.

The Ohio and Kentucky delegations have been meeting regularly with DOE staff to ensure full implementation of the provisions of Public Law 105-204, legislation I introduced with Senator McConnell, to ensure that all amounts accrued on USEC's books for the disposition of depleted uranium hexafluoride, will be used to treat and recycle that by-product by constructing two plants for that purpose—one at Paducah, and one at Portsmouth.

The plan and proposed legislation to implement the law's provisions to dispose of this uranium were supposed to be set forth in the fiscal year 2000 budget. While I understand that DOE will soon put out an Expression of Interest and Request for Proposal, I am concerned about the amount of time it has taken the Department to move ahead with full implementation of the provisions of Public Law 105-204.

Even under the best-case scenario, it's clear that these plants will not be up and running in time to mitigate the job losses we already know are forthcoming, especially with the continued importation of enriched uranium from Russia.

And, of course, Secretary Richardson was in Paducah just a few months ago, and made the announcement that they would proceed with those plants, and that it would be a part of the fiscal year 2000 budget—which it is my understanding it is not.

But we hope to hear more from Dr. Moniz about this issue, and I hope that you will be able to give us your assurance of DOE's commitment to move forward with the full implementation of Public Law 105-204.

With that, I yield back the balance.

Mr. BARTON. I thank the gentleman. We now recognize the gentleman from Tennessee for a brief opening statement.

Mr. BRYANT. I thank the Chair, and welcome our distinguished panel. In the interest of time, I will simply submit any statement that I might have for the record.

Mr. BARTON. Thank you. Does the gentleman from California wish to make a brief opening statement?

Mr. ROGAN. Mr. Chairman, thank you. Very briefly, I want to thank you for calling this hearing, and just touch on one quick point.

My one concern in the President's budget is the DOE's lack of activity on nuclear waste disposal. The budget itself provides $370 million for the Yucca Mountain Nuclear Waste Repository project, but makes this funding contingent upon postponing depositing materials there until the year 2010. As recent court cases have held, the Department of Energy is responsible for not accepting this waste by the beginning of the year, per Federal law. Therefore, funds must be allocated to accelerate acceptance, to avoid liability. It doesn't appear that any such provision has been made in President Clinton's budget.

As there is a good deal of nuclear waste which must be handled in California, it is key that a repository effort be accelerate for public safety. It may be worthwhile to request an update at some point on the Department of Energy's progress on the Yucca Mountain site. Further, I believe the DOE must make an effort to describe its long-term plans to make this repository functional.

With that, Mr. Chairman, I thank you again. I yield back the balance of my time.

Mr. BARTON. I thank the gentleman. The gentleman from Maryland is recognized for a brief opening statement. Okay. The gentleman from Oklahoma, Mr. Largent.

Mr. LARGENT. Thank you, Mr. Chairman. I just want to say that I'm pleased as I come this morning and see the Department of Energy and Secretary Richardson's statement on America's oil, our strategic resource. We need to make sure that the plight of the domestic oil and gas producers in this country is addressed. It's an immediate concern—just last year, the industry itself lost 30,000 jobs; in the 10 years, the number's approaching a half a million jobs.

We are losing our ability to produce oil in this country, and it is a real—it's not just a colloquial interest for Oklahoma, which I represent—it's a national security issue that we have to address. And so, I look forward to working with the Secretary of the Department of Energy, with this committee, in addressing the real concerns that we have—particularly coming from an oil-patch State—of losing our ability and capacity to produce oil in this country.

Thank you.

Mr. BARTON. We thank the gentleman. The Chair concurs with that concern.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Thank you, Mr. Chairman. I appreciate this opportunity to hear more about the specifics of the Department of Energy's Fiscal Year 2000 budget.

I understand that the primary mission of the Office of Civilian Radioactive Waste Management is to develop a permanent geologic repository for the disposal of spent reactor fuel and high-level nuclear waste. DOE requested $370 million in new budget authority for FY 2000, a modest increase over FY 1999 of $12 million. Still, this may not be enough money to adequately fund the project at the Yucca Mountain site. Because the payments of utility ratepayers into the Nuclear Waste Fund are expected to soon be over $649 million, I would like to know if, in this budget, these fees will be diverted to other federal programs.

In Florida, we have five nuclear units which provide about 19 percent of the state's electricity generation. The benefits of this fuel source are clear: the use of nuclear energy has reduced Florida's carbon dioxide emissions by 96.7 million metric tons since 1973.

However, these benefits have not come without a price. Since 1983, consumers of nuclear-generated electricity have contributed over $649 million to the federal Nuclear Waste Fund. This fund was to finance nuclear waste management beginning in January 1998. However, the Department of Energy's failure to meet the January 1998 deadline to begin storing used nuclear fuel clearly violates the federal agency's contract with electric utilities operating Florida's nuclear power plants.

I am concerned that this budget revealed little effort on DOE's part to meet this obligation. I look forward to hearing more about DOE efforts to address this issue. Thank you.

PREPARED STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. Chairman, as always, I am delighted to be here this morning. Thank you for holding this important hearing. I believe it is important for the Congress and the Administration to sit face to face, at the very least, once a year to discuss how we are spending the taxpayers dollars. Though we do not always see eye to eye I do appreciate the good efforts of the Department and its dedicated public servants.

I will have questions regarding our energy security, particularly about the small oil producers in my district. I am also very concerned about the growing liabilities to the department regarding commercial nuclear waste. I believe the Department has lost two court cases recently and I am curious as to how they plan to pay for these liabilities. I imagine these liabilities will be paid out of the Department's budget. Last, but by no means the least, I am also going to be looking for an update on the Department's progress regarding Public Law 105-388, which extended several programs under the Energy Policy and Conservation Act. This reauthorization had language which I drafted in conjunction with Chairman Barton last year to enhance and promote the alternative fuels program established under EPACT. I am looking forward to this hearing today and I know Dr. Moniz will do his very best to answer our questions. Good Morning, Dr. Moniz. I yield back, Mr. Chairman.

PREPARED STATEMENT OF HON. TOM BLILEY, CHAIRMAN, COMMITTEE ON COMMERCE

Thank you, Mr. Chairman. This is an important hearing, as it provides our Members with an opportunity to review in detail the Department of Energy's budget request for Fiscal Year 2000, and it provides the Department with an opportunity to explain and justify to us the roughly $18 billion dollars that it has requested for the coming fiscal year. Many of the difficult issues before us in the 106th Congress deal with energy programs. This budget hearing will help us determine whether the priorities of the Department are consistent with the priorities of the Congress.

My priorities on energy issues are clear and simple. First, we must move forward with legislation to open up the electric utility industry to retail competition. Everyone now acknowledges the benefits that consumers will realize from opening our electricity markets to competition—the question is not whether electricity restructuring is a good idea, but how much of a role the Federal government should play and how quickly we should proceed with restructuring.

A number of States are already pursuing restructuring, with varying degrees of success. These are commendable efforts, but not all States are moving forward to

deregulate their electricity markets with the same enthusiasm. It is becoming obvious that the States cannot do this alone. The States cannot address the interstate commerce issues that arise in restructuring, nor can they address the host of Federal statutes that define the present Federal role in electricity. To assure a level playing field, and most importantly, to assure a fair deal for all consumers, Federal action is required.

I have tasked Chairman Barton to develop legislation that will permit consumers to choose their electric supplier, that will promote competition among electric suppliers, and will remove existing barriers to interstate commerce in retail electricity markets. I trust that we will have the full cooperation of the Department of Energy in our efforts.

My other priority is solving the problem of spent fuel and high-level nuclear waste. The Department recently released a Viability Assessment that shows us that the technical problems are solvable. The challenges we must now confront are not the technical ones—Congress and the Administration must now come to terms with the financial, legal, and political aspects of this problem.

Under the current DOE plan, the permanent repository will not be able to begin accepting spent fuel until, at the earliest, the year 2010. That date is, quite simply, over a decade too late. That is not the deal we made with the American people back in 1982, when Congress and the President promised that the Federal government would begin accepting spent fuel starting on January 31, 1998. That date has come and gone, and we are still here debating this issue. The courts have already spoken on this question, and have held that DOE has an unavoidable, binding obligation to take this spent fuel. If DOE persists in adhering to a schedule that won't allow the repository to open until 2010, it is just compounding the potential financial liability facing the Federal government.

All of us here today, both from the Congress and from the Administration, have a responsibility to the American people to solve this problem. We must ensure that the permanent repository is on firm financial footing and that it is proceeding towards the earliest possible completion date. In addition, we must explore alternatives that would allow DOE to take possession of spent fuel at an earlier date, placing it in interim storage until the permanent repository opens.

This Subcommittee has already held a hearing on legislation which would accomplish these goals. We want Secretary Richardson to testify on this question, and then we plan to mark up this legislation and take it to the floor of the House. Dr. Moniz, I hope you and your staff are ready to roll up your sleeves and work with us in a constructive manner to solve this problem. We need to show the American people that this government keeps its promises.

I look forward to hearing the Department's testimony, and I thank Chairman Barton for holding this hearing.

PREPARED STATEMENT OF HON. RALPH M. HALL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Thank you, Chairman Barton, for calling this hearing and giving us the opportunity to hear from the Department of Energy and to review their budget request for Fiscal Year 2000. I want to also extend a welcome to our witness, Under-Secretary Moniz, along with his staff.

We have several pressing issues facing this Committee in the next year, and we are hopeful that we will gain the cooperation of both the Department, and the Administration in working toward the resolution of these issues. First in my mind, the question looms as to whether and for how long the Administration will continue to oppose all reasonable efforts at reaching a consensus on an appropriate opening date for storage of spent nuclear waste at Yucca Mountain. While the Administration indulges in last minute attempts to discourage action towards the goal of opening this waste site, judgements grow both in size and in numbers, and the taxpayers and the rate payers get hit with the bill.

Of course, being from an energy producing state, I remain concerned about the continued plight of the independent oil and gas producers. This entire industry has felt the devastating impact of low priced foreign imports coupled with the reversal of our former trade policy with Iraq. While the Administration sees fit to permit the purchases of oil from this terrorist country, in the name of humanitarian assistance, it would seem appropriate that the Administration take both an humanitarian, and a national security interest in doing more to provide assurances to our own domestic, independent producers.

These folks are facing "no turning back" decisions about capping wells. Once this happens, not only will multigenerational small and family owned businesses be de-

stroyed, but we as a nation will be throwing ourselves at the mercy of foreign powers who will then decide how much our consumers should pay for a monopolized commodity. As a matter of logic, and as a matter of patriotism, the Administration must place our national security above foreign humanitarian ventures in Iraq.

Finally, I want to say that I am hopeful that we will be hearing from the administration in the near future on their legislative recommendations for an electricity restructuring bill.

Again, I want to thank you Mr. Chairman, for calling this hearing today, and I yield back the balance of my time.

PREPARED STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Thank you Mr. Chairman. I welcome Dr. Moniz back before our subcommittee today.

I want to highlight some areas of the budget that are of interest to me. For instance, I'm pleased to see the Department of Energy's (DOE) FY2000 request of nearly $1.2 billion (which represents a 28% increase) to research, develop and deploy energy efficient and renewable energy technologies. This amount includes $399 million for DOE solar and other renewables programs (a 19% increase over last year). An additional $47 million has been made available for renewables through DOE's science program, as well. These are the programs of the future and it makes sense to invest in them today.

I also see that the Department's FY2000 request includes $32 million for the Federal Energy Management Program (FEMP), which is important because the Federal Government is the nation's largest single energy user. The FEMP program helps identify, finance, and implement energy efficiency and renewable energy projects in federal facilities, resulting in conservation of energy resources and billions of dollars in savings each year.

Along these lines, I also support the DOE overall budget request of $1.1 billion for the climate change technology initiative for all DOE climate-related research & development activities.

In the same vein, I'm glad that the administration is again requesting funding for its fusion energy program. In addition to the importance of fusion energy that we've discussed in previous years, particularly in light of current events, successful development of fusion will address the ever-present threat of international conflict over energy resources and could play an important role in reducing or altering atmospheric CO_2 emission levels that contribute to global climate change. The Princeton Plasma Physics Laboratory (in my state of New Jersey) contributes to new and innovative approaches to fusion energy. For these reasons, I believe that funding for fusion energy sciences should be increased from last year's enacted level of $223 million to $260 million in FY2000. Ten million of this $260 million should be directed toward the Tokamak program at Princeton University for Decontaminating and Decommissioning (D&D) the Tokamak Fusion Test Reactor (TFTR). The President's Council of Advisors on Science and Technology has recommended that the fusion energy sciences be funded at $270 million.

I also wish to address the administration's request for the nuclear waste disposal program. Last week, a DOE representative testified for the first time that there is not enough money in the nuclear waste fund to pay for both interim and permanent nuclear waste storage facilities. DOE has not planned to build nor provide money for an interim facility, nor is it planning for such an eventuality in the near future. Thus, DOE has requested $370 million in new budget authority for FY2000, but this may still not be sufficient to fund permanent and interim storage and the related studies. And yet, ratepayers are expected to pay over $630 million into the nuclear waste fund in FY2000. In addition, the Administration is requesting the release of an additional $39 million that has been held in reserve until authorized for use by Congress. This amount was intended for interim storage, when DOE was considering this concept back in the 1980s, but this sum is now being requested to help pay for the ongoing scientific investigative work at Yucca to further determine the site's suitability for permanent storage. If H.R. 45 were enacted into law, it appears funding for interim storage would be severely lacking and that the permanent site could face even greater delays due to funding problems. Moreover, I continue to be concerned that this administration—like previous administrations and some here in Congress—has become addicted to ratepayer money as a source of deficit reduction.

Another issue that is going to require increasing U.S. attention is the management and cleanup of spent fuel and radioactive waste in Russia. I recently spoke on this topic at an international conference. It is not enough to support counter-pro-

liferation activities alone. We must also assist Russia in properly dismantling, storing, disposing, and cleaning up from the legacy of its nuclear arsenal buildup. To this end, I am pleased to see that the budget request for nonproliferation and national security activities includes $30 million for the new nuclear cities initiative. This program will help employ Russian scientists in civilian research endeavors, hopefully to begin to address the drastic environmental and health problems facing Russia as a result of its nuclear buildup. I hope that DOE will continue to devote substantial resources to these activities as time goes on, because the consequences of inaction will be global. In addition, better coordination and management activities needs to occur at the highest levels of our administration. I am pleased that the Consortium for Risk Evaluation with Stakeholder Participation (CRESP) led by the Environmental and Occupational Health Sciences Institute in New Jersey is working to clean up several nuclear sites in the U.S. in cooperation with the DOE. Perhaps their efforts could be expanded to provide international assistance in the future.

In closing, I look forward to working with you to ensure that we see concrete progress in all of these program areas. Thank you, Mr. Chairman.

PREPARED STATEMENT OF HON. TED STRICKLAND, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Thank you Mr. Chairman. And, I would like to thank the Under Secretary for coming to the Hill today to address a range of budget concerns and answer questions held by many of us on the Energy and Power Subcommittee. Specifically, Mr. Under Secretary, I have a number of questions regarding the ongoing work at the Portsmouth, Ohio Gaseous Diffusion Plant and very serious concerns about the Department's progress in developing its depleted uranium hexafluoride program. As you know, the United States Enrichment Corporation or USEC, Inc. operates the two gaseous diffusion plants in the nation—one of which is in my district. These plants were initially built by the federal government to process uranium for national defense purposes during the Cold War. Now, they process uranium for purchase by the commercial nuclear power industry.

As you also know, Mr. Under Secretary, last July, the Congress passed and the President signed into law P.L. 105-204. The successful passage of this legislation was possible through a terrific bipartisan and bicameral effort and I would like to thank my colleague from Kentucky, Mr. Whitfield, for his active support of that legislation. Furthermore, I would like to express my appreciation for the guidance provided by the leadership of the Commerce Committee, Chairman Bliley and Mr. Dingell and of course, the advice of their dedicated staff.

Briefly, P.L. 105-204 secured almost $400 million from USEC, which sits in an account at the Department of Treasury, for the development of a program to convert and stabilize more than 9000 canisters of depleted uranium hexafluoride generated and stored at both the Portsmouth, Ohio and Paducah, Kentucky sites. I regret to say that I have serious reservations about the commitment of the Department's Nuclear Energy Office to meet the statutory requirements under P.L. 105-204. Requirements, which I might add, share a remarkable amount of bipartisan support from both the states of Ohio and Kentucky.

I also have reservations about the role of USEC as the Executive Agent under the Russian-Highly Enriched Uranium Agreement. This past July USEC was sold in an initial public offering. As a private industry, USEC, Inc. serves as the Executive Agent for the Russian-HEU Agreement with the responsibility for purchasing specific quantities of Russian uranium. USEC's role as the Executive Agent for the Russian-HEU Agreement directly conflicts with the corporation's responsibility to meet requirements outlined in the Energy Policy Act of 1992 and the USEC Privatization Act of 1996. One such condition was the continued operation of the gaseous diffusion plants in Portsmouth and Paducah. During the process of privatizing USEC, I repeatedly reminded officials in the Administration, including the Department of Energy, that the corporation's function as Executive Agent for the HEU Agreement would result in decisions that may adversely affect the continued operation of the gaseous diffusion plants and therefore violate the statutory terms and conditions established by Congress. Furthermore, I was seriously troubled that either the workers and communities in southern Ohio would suffer tremendously or potentially an incredibly important foreign policy objective would not be met. Neither option was or is acceptable to me.

In an effort to address the issues raised during privatization of USEC, DOE entered into two Memoranda of Agreement with USEC to provide $66 million for the liabilities arising out of the disposal of depleted uranium generated by USEC prior

to privatization and the maintenance of depleted uranium tails transferred to DOE from USEC through fiscal year 2004. A primary objective of the Agreements is to mitigate job losses by offering displaced workers with retraining and a hiring preference for the maintenance and disposition of the depleted uranium hexafluoride canisters located at Portsmouth and Paducah.

I worked closely with officials in the Administration, including the Department of Energy, to ensure that the dedicated workforce and families long committed to supporting our nuclear industry would not now find themselves left out in the cold at the declared end of the Cold War. I cannot overstate how important this $66 million is to southern Ohio and western Kentucky. My district simply has not enjoyed the economic recovery that the rest of the state of Ohio and much of the nation enjoys. For this reason, I urge you to empower the appropriate DOE officials to move forward on a plan for spending this $66 million in as expeditious a manner as humanly possible.

Finally, but not of least importance, I must make you aware of an annual funding battle I undertake with a number of my colleagues from both sides of the aisle. I am confident you are well aware of the good work done by the Worker and Community Transition Office. This office exists to to minimize layoffs and assist communities affected by the Department's shift from weapons production to other missions. The Department continues to work toward closure of numerous sites throughout the complex which will ultimately lead to the dislocation of workers.

The Portsmouth and Paducah sites are undergoing a tough transition to a privately managed operation. This process, too, will result in a significant reduction in the workforces at the gaseous diffusion plants. In fact, USEC, Inc. recently issued a press release announcing its second round of reduction in force which will involve approximately 250 employees at the Portsmouth and Paducah sites. This comes shortly after the completion of round one in November 1998 which resulted in 259 layoffs shared by the two sites. The Worker and Community Transition Office must have adequate funding to continue to help workers affected in Ohio, Kentucky and throughout the DOE complex.

I must add that these significant layoffs at the gaseous diffusion plants become particularly alarming when we acknowledge that USEC, Inc. is limited to annual layoffs at the sites because of an Agreement it has with the Department of Treasury. Under the Treasury Agreement USEC, Inc.. must keep its annual workforce reductions for each of the next two years to 250 people between the two gaseous diffusion plants. However, in July 2000, that Treasury Agreement expires and USEC, Inc. will no longer be limited in its workforce reductions. I have heard projected numbers of future layoffs and for this reason, the Worker and Community Transition Office absolutely must be ensured adequate funding to provide the necessary resources to minimize the potential economic impacts of privatization and restructuring.

I have taken enough time to provide some background for the questions I have prepared to ask today. I appreciate your time and cooperation and I look forward to hearing your answers to my inquiries. Thank you.

Mr. BARTON. Dr. Moniz, we will welcome you to the subcommittee. Before we let you begin, the Chair announces that all members not present have the requisite number of days to put a written statement in the record if they so wish, unless there's an objection. Hearing none, so ordered.

We'll put your statement in its entirety; we're going to recognize you for such time as you may consume, and at the conclusion of your statement, unless Mr. Telson wishes to also make a brief statement, then we'll begin to ask questions.

Welcome, Dr. Moniz.

STATEMENT OF ERNEST MONIZ, UNDER SECRETARY OF ENERGY; ACCOMPANIED BY MICHAEL TELSON, CHIEF FINANCIAL OFFICER, DEPARTMENT OF ENERGY

Mr. MONIZ. Thank you, Mr. Chairman and members of the subcommittee, for the opportunity to appear before you today to discuss the fiscal year 2000 budget request for the Department of Energy.

I will just note, given your earlier reference, Mr. Chairman, that I will be leaving this evening for your home State—for a pleasant day, I'm sure, tomorrow.

In fiscal year 2000, the Department requests $17.8 billion dollars for all of its science energy research, energy security, environmental quality, and defense activities. This is slightly less than the amount appropriated last year.

Let me provide a very brief overview of the Department's four principal mission areas: In science, our main goal is to ensure that the Nation's preeminent scientific infrastructure successfully meets the missions and goals the Nation has set for the Department of Energy. In turn, the Nation's scientific community depends on DOE, and on our laboratory system, to maintain U.S. leadership in an extensive range of research disciplines. In particular, the Department has a unique responsibility for designing, building and operating an extensive set of facilities for over 15,000 scientists and engineers across the Nation. For example, this year's budget supports critical initiatives in material science—for example, construction of its palatia neutron source—and in high-end computing for science and engineering the scientific simulation initiative.

These are examples of key enabling technologies for science, and for our country's economy in the future. Our request for science funding for fiscal year 2000 is $2.8 billion, an increase of 5.1 percent.

In national security, the Department plays a critical role, by ensuring the safety, security, and liability of our nuclear arsenal, and by reducing the dangers of the spread and use of weapons of mass destruction. The Department is maintaining the nuclear stockpile safely and reliably, without testing, thereby supporting a comprehensive test ban while sustaining the nuclear deterrent.

The Department also plays a central role in securing nuclear materials and know-how in the former Soviet Union, in support of America's non-proliferation goals.

The technological strength of the Department's laboratories is being used to protect America from the threat of weapons of mass destruction. The Department's $6.3 billion request—$6.2 billion request, excuse me—for national security programs, is an increase of 4.1 percent over the fiscal year 1999 appropriation.

In environmental quality, the Department's task is to continue to make progress in cleaning up the environmental legacy of the cold war, while minimizing the risks to human health and safety. Our goal is to finish the clean-up job at most of our sites by the year 2006, while systematically addressing the persistent challenges at our largest clean-up sites in accordance with various regulatory agreements. DOE's strong science and technology base, and our capacity to conduct inter-disciplinary, leading-edge R&D, will help up accomplish our clean-up goals. Furthermore, we will continue to work toward resolving the scientific and technical issues surrounding the important problem of disposal of spent nuclear fuel, both civilian and military.

The Department is requesting $5.9 billion for the Office of Environmental Management—roughly $100 million more than the current year. We are also requesting $409 million for the Office of Civilian Radioactive Waste Management, which is needed to complete

the work identified in the viability assessment, as necessary to be able to make a suitability determination about Yucca Mountain in 2001.

In energy resources, the Department of Energy is the lead agency in the administration's commitment to abundant, affordable, secure and clean energy, and to electricity restructuring. Energy is, as you know, the life-blood of our economy. The Department is advancing a broad R&D portfolio to improve the efficiency of, and reduce the emission from, fossil fuel use; to advance the development of economical renewable technologies; and to provide nuclear energy options that are passively safe, proliferation-resistant, and waste-minimizing.

At the same time, energy use is at the core of some of our most pressing environmental challenges—smog and particulate emissions, acid rain, global warming. Once again, DOE's policy initiatives and energy R&D portfolio, which focuses attention on increasing energy efficiency, will simultaneously help us sustain a strong economy and improve environmental quality. The Department will work with Congress to advance electricity sector restructuring, which will bring lasting benefits to all Americans, to the economy, and to the environment.

The Department's request for programs comprising the Energy Resources Business Line is $2.3 billion—an increase of roughly 2 percent.

In the little time I have remaining, I'd like to just highlight some of our initiatives in the energy resources area. First, the Secretary has led a wide range of initiatives to enhance America's energy security. These follow four basic strategies, and are summarized in the briefing material that we provided you this morning.

One, is to enhance America's energy security, including actions such as Federal royalty oil for the petroleum reserve—commercial storage in the petroleum reserve.

The second strategy is to preserve domestic oil and gas production capacity, suspension of reduction requirements for stripper oils on Federal lands, royalty relief on Federal lands, Petroleum Technology Transfer Council crisis assistance to independents.

A third involves trying to help lower costs of production, access to problem-solving technologies for independents, advanced technologies for improved recovery from endangered reservoirs, energy-efficient technologies for oil production, administrative and accounting relief on Federal lands.

And finally, fourth strategy of improving government methods for making decisions. That is, improve coordination with other Federal agencies, and dialog with industry, States and Congress.

I have brought with me, again, today, a short summary of these strategies.

Turning to electricity restructuring—very briefly—this, of course, is not a budget initiative—as you know, we strongly support restructuring, to ensure that U.S. consumers receive the benefits of economically efficient energy production, and that the production and transmission sectors are encouraged to maximize their efficiency.

The administration supports the progress that is being made toward promoting retail competition in the utility industry. Our anal-

ysis indicates that competition will benefit consumers in the economy, to the tune of roughly $20 million per year, and that it will also be good for the environment. Approximately 20 States have enacted legislation, or promulgated regulations, that either have led or will lead to the implementation of retail competition programs.

The Department believes it is important to act sooner rather than later to complement what is going on at the State level, and stands ready to work with Congress to get the job done.

As Under Secretary, one of my main responsibilities is to ensure that all the R&D activity supported by DOE, or performed by our laboratories, serve the missions and goals set out for the Department. To do this, we are organizing, over the past year, all of our R&D activities at DOE into a comprehensive portfolio, and assessing whether the portfolio is well-balanced to meet the Department's mission needs. We are in the last stages of developing the DOE R&D portfolio. I hope to share it with you within weeks.

This will be the first time the Department publishes a document that will provide in one place a clear description of our entire research portfolio, organized around their support for the Department's strategic goals. The document will describe our current R&D activities and accomplishments, it will be a basis for assessing how balanced the portfolio is for long-term pursuit of our strategic goals, and it will be a tool for helping to plan for future investments through road-mapping.

In the energy resources R&D portfolio, there are many examples in our fiscal year 2000 budget request that point to the future. I'll just name a few—they include Vision 21 Powerplex, carbon sequestration R&D, the partnership for a new generation of vehicles, the nuclear energy research initiative—and one I'll comment on just briefly—the scientific simulation initiative, where we will develop a new program to develop large-scale, high-end computing simulation capabilities of chemical reactions, fluid dynamics, and heat transfer, associating with combustion, in order to facilitate the rapid design of improved combustion devices.

Improved efficiency of such devices may provide savings of up to $26 billion in fuel costs, and approximately 2.7 gigaton reduction in carbon emissions for internal combustion engines alone. Just an example of the kind of return we anticipate as being possible from our basic science investments.

The budget we have submitted attempts to balance many competing demands—from the scientific and national security communities, from industry, and from communities that surround and host our facilities—within current budgetary constraints. We believe this budget—along with some of the essential policy initiatives I have outlined—achieves this balance, and we ask for your support.

Thank you again for the opportunity to testify this morning, Mr. Chairman, and I would like to introduce Dr. Mike Telson, the Department's Chief Financial Officer. Also, we are accompanied by several key program staff and would be please to answer any questions subcommittee has regarding our 2000 budget.

[The prepared statement of Ernest Moniz follows:]

PREPARED STATEMENT OF HON. ERNEST MONIZ, UNDER SECRETARY OF ENERGY, DEPARTMENT OF ENERGY

Thank you, Mr. Chairman, and Members of the Subcommittee, for the opportunity to appear before you today to discuss the FY 2000 budget request for the Department of Energy.

In FY 2000, the Department requests $17.8 billion dollars for all of its science, energy research, energy security, and defense activities. This is slightly less than the amount requested last year. This request supports the Departments activities in four business lines:

- National Security: $6.228 billion
- Energy Resources: $2.318 billion
- Environmental Quality: $6.452 billion
- Science: $2.844 billion

This budget request, and the programs it supports, reflect the Administration's agenda to meet the challenges of the 21st century. The research and development capabilities of the Department of Energy place it at the forefront of many of the technological advances that will define the next millennium. "Science, Security, and Energy: Powering the 21st Century" is more than just the theme of our budget request this year; it defines the unique contributions that DOE has been making, and will continue to make, towards improving the lives and the security of all Americans. Attached to this testimony are concise summaries of the budget requests for each of our programs.

DOE'S MISSIONS

In *National Security,* DOE plays a critical role by ensuring the safety, security, and reliability of our nuclear arsenal, and through our efforts, to reduce the dangers of the spread and use of weapons of mass destruction (WMD). The Department is maintaining the nuclear stockpile safely and reliably without testing, thereby supporting the Comprehensive Test Ban while sustaining the nuclear deterrent. The Department also plays a central role in securing nuclear material and knowhow in the Former Soviet Union, in support of America's non-proliferation goals. The technological strength of the Department's laboratories is being used to protect America from the threat of weapons of mass destruction.

In *Energy Resources,* DOE is the lead agency in the Clinton Administration's commitment to abundant, affordable, secure, and clean energy, and to electricity restructuring. Energy is the lifeblood of our economy. The Department is advancing a broad research and development (R&D) portfolio to improve the efficiency of, and reduce the emissions from, fossil fuel use; to advance the development of economical renewable technologies; and to provide nuclear energy options that are passively safe, proliferation resistant, and minimize waste.

At the same time, energy use is at the core of some of our most pressing environmental challenges: smog and particulate emissions, acid rain, and global warming. Once again, DOE's policy initiatives and energy R&D portfolio—which focuses attention on increasing energy efficiency—will help us to sustain a strong economy with ample and clean energy resources. The Department will work with Congress to advance electricity sector restructuring, which will bring lasting benefits to all Americans, to the economy, and to the environment.

In *Environmental Quality,* the Department's task is clear. We will continue to make progress in cleaning up the environmental legacy of the cold war nuclear weapons program, and we will do so while minimizing the risks to human health and safety. Our goal is to finish the cleanup job at most of our sites by the year 2006, while systematically addressing the persistent challenges at our largest cleanup sites, in accordance with various regulatory agreements. The scientific and technical issues involved in meeting this challenge are among the most complex of any environmental cleanup job anywhere in the world. DOE's strong science and technology base, and our capacity to conduct interdisciplinary, leading edge R&D, will help us to accomplish our cleanup goals. Furthermore, we will continue to work towards resolving the scientific and technical issues surrounding the disposal of spent nuclear fuel.

In *Science,* our main goal is to ensure that the nation's preeminent scientific infrastructure successfully meets the missions and goals that the nation has set for the Department of Energy. At its heart, DOE is a science agency. Each of DOE's mission areas relies on cutting edge science and technology to achieve its objectives. And the nation's scientific community depends on DOE and the DOE laboratory system to maintain U.S. leadership in an extensive range of research disciplines. In particular, the Department has a unique responsibility for designing, building, and

operating an extensive set of user facilities for basic and applied research, serving over 15,000 scientists and engineers across the nation.

As Under Secretary, one of my main responsibilities is to ensure that all the research and development activities supported by DOE, or performed by DOE's laboratories, serve the missions and goals set out for the Department. To do this we are organizing all R&D activities at DOE into a comprehensive portfolio, and assessing whether this R&D portfolio is designed optimally to meet the Department's mission needs. We are in the last stages of developing the *DOE R&D Portfolio.* This portfolio will describe and analyze, for each of the four business lines, how the overall goals of the Department are supported by the specific R&D activities carried out in each program, and will facilitate discussions with the Department's stakeholders.

NATIONAL SECURITY

The Department's $6.228 billion request for National Security programs is an increase of $244 million over the FY 1999 appropriation. The FY 2000 request for *Weapons Activities* is $4.531 billion; this includes $2.286 billion for the Stockpile Stewardship program and $2.071 billion for the Stockpile Management program. The Stockpile Stewardship program is a science-based program designed to ensure the safety, security, and reliability of the nuclear deterrent without underground nuclear testing. Critical to the success of this effort is the Accelerated Strategic Computing Initiative (ASCI), which is developing state-of-the-art supercomputers and associated applications.

Another important component of this program is the National Ignition Facility (NIF), a 192-laser beam facility under construction at Lawrence Livermore National Laboratory, that will advance not only our understanding of the physics of nuclear weapons, but will also advance mankind's knowledge in fusion and basic science. The Stockpile Management program request includes $170 million for the tritium program, which will be used to develop the irradiation services option chosen by Secretary Richardson, and to complete design work on the accelerator option in order to preserve it as a "back-up" capability.

The $767 million dollar budget for *Nonproliferation and National Security* is an increase from $697 in FY 1999. This does not include separate requests for Intelligence ($36.1 million) and Counterintelligence ($31.2 million—$18.6 in new budget authority). We are asking for $221 million for Nonproliferation Research and Development to develop technologies for detecting nuclear explosions, detecting the production of different forms of WMD, countering chemical and biological weapons that could be released in our cities, and aiding federal, state, and local law enforcement agencies.

Our request also includes $30 million for the Initiative for Proliferation Prevention and $30 million for the Nuclear Cities Initiative. These programs are designed to ensure that Russia's most experienced scientists and technicians can be gainfully employed at a time when they are highly sought after by rogue nations and terrorist organizations.

The *Fissile Materials Disposition* program includes a request for $200 million to provide storage for U.S. weapons usable uranium and plutonium, while providing a technical basis for similar actions by the Russians. The Department recently announced that Savannah River is the preferred site for the Pit Disassembly and Conversion Facility (FY 2000 request of $28.8 million) and the Mixed Oxide Fuel (MOX) Fabrication facility ($12.4 million).

The Worker and Community Transition program request is $30 million. This will allow the Department to facilitate earlier site closures and to promote the reindustrialization of excess facilities. The result should be long term savings approaching $1 billion. The program also makes it possible to move to more efficient contracting mechanisms while utilizing the skills of the existing work force. In the case of Oak Ridge, for example, we were able to avoid immediate severance liabilities of up to $45 million.

ENERGY RESOURCES

The three key elements of DOE's Energy Resources mission are energy security, clean energy, and electricity industry restructuring. The Department of Energy continues to play a major role in helping to ensure the Nation's energy security and responding to both U.S. and world energy demand and the environmental consequences associated with energy production and utilization. And just as end of the Cold War left us with significant new national security challenges, the current international energy and economic situation bring with them new energy challenges.

While it may be of benefit to U.S. consumers, the international oil market has created significant problems for producers. Low prices and abundant near-term sup-

ply will exacerbate the decline in higher cost domestic production while making investments in new energy supply and increased efficiency less attractive. This has the potential to increase U.S. dependence on imported oil and increase our vulnerability to future price increases and supply shortages. The Department and the Administration are moving to address these challenges on several fronts.

First, in December, the Secretary appointed an internal Emergency Oil Task Force to develop a balanced oil action plan to enhance America's energy security, preserve domestic oil production capacity, lower the cost of production and to explore other actions government can take.

To enhance America's energy security, we have developed a plan for using 28 million barrels of Federal Royalty Oil to fill the Strategic Petroleum Reserve (SPR) from off-shore oil production in the Gulf of Mexico. We also offered unutilized SPR capacity for long term commercial storage with storage fees to be paid in oil to increase the inventory. These steps reduce the vulnerability of the U.S. economy at tremendous cost savings to the taxpayer.

To help lower the costs of production, we just committed $18 million for a technology-driven, industry cost-shared program to improve oil recovery from endangered domestic reservoirs. We also kicked off a program to assist small independents—those with less than 50 employees—that have specific production problems, ranging from reservoir characterization to environmental compliance. We are working with other agencies and the Administration to suspend production for stripper oil wells on federal lands. These steps prevent premature abandonment of important well capacity, maintain domestic production and preserve oil and gas and small business infrastructure.

To lower the cost of production, we are announcing plans to expand the use of energy-efficient technologies to lower the cost of oil production. We are inaugurating a pilot program for on-line oil and gas permitting for state agencies. We are aggressively pursuing improved recovery from high-potential reservoirs, and we have requested a 3.2% increase in oil technology research and development for FY 2000—a modest reversal of the historic pattern of annual reductions, but a reversal nonetheless.

In another action to preserve our domestic production, the Department is exploring possibilities for targeted tax relief. Such relief would have to be cost-effective and would require budget offsets. Any tax relief proposal would require the concurrence of the rest of the Administration, and the passage of legislation by the Congress.

Second, the Department has moved very aggressively to reshape the way in which we make technology investment decisions to maximize our national return on those investments. Throughout the Department, and especially within the civilian research and development sector, we have initiated technology "road-mapping." The process involves cooperative discussions between the Department and industry sectors to determine technology needs and the types of research and development activities needed to address them. These roadmapping efforts serve two purposes. They act as a catalyst for the industry to develop an effective R&D roadmap, and they help us to identify those investments which are most appropriate for the government to make. When appropriate, we are requiring significant cost-sharing with industry to ensure marketplace of the research agenda and a concomitant predisposition to deployment of the new technologies.

We have also requested increases in funding to develop and deploy new, energy efficient technologies that would not otherwise receive adequate private-sector backing in the face of historically low energy prices. These investments make good economic sense, and good environmental sense. The FY 2000 budget includes a 20 percent increase, or $209 million, to fund energy efficiency and renewable energy programs.

Third, we strongly support legislation to restructure the electricity industry to ensure that U.S. consumers receive the benefits of most economically efficient energy production and that production and transmission sectors are encouraged to maximize their efficiency.

The Clinton Administration supports the progress that is being made towards promoting retail competition in the electric utility industry. Our analysis indicates that competition will benefit consumers and the economy to the tune of $20 billion per year, and that also it will be good for the environment. The Department of Energy will soon be forwarding an updated version of the Administration's Comprehensive Electricity Competition Plan to Congress. This revised legislation will retain the basic framework of encouraging retail electric competition, but providing the states and unregulated municipal and cooperative utilities the flexibility they need to "opt out" if they determine that competition would not be beneficial to their consumers. Under the leadership of Secretary Richardson, the Department has been engaged

in an effort to fine-tune the legislation the Administration sent to Capitol Hill last year to: (1) make the bill more consumer friendly, and.; (2) address issues which were not contained in the original proposal (e.g., the role of federal utilities in a competitive environment).

Approximately 20 states have enacted legislation or promulgated regulations that either have led or will lead to the implementation of retail competition programs. Almost every other state has the matter under active consideration. While the states are playing a primary role in the move towards competition, Federal action is necessary to remove the statutory impediments that currently exist and also to ensure that interstate electricity markets are sufficiently competitive and reliable. The Department believes that it is important to act sooner rather than later to complement what is going on at the state level, and stands ready to work with Congress to get the job done.

Energy Efficiency and Renewable Energy

The Department's Energy Efficiency and Renewable Energy Program has five principal objectives: (1) to reduce U.S. reliance on imported oil through improving efficiency and increasing the use of domestic renewable energy resources, (2) to maintain U.S. technological expertise and competitive advantage in global energy technology markets, (3) to minimize and reduce pollution attributable to energy consumption, (4) to develop and deploy technologies capable of reducing greenhouse gas emissions, and (5) to align the strategy for development of efficiency and renewable energy technologies with the new demands of a deregulated electricity market.

The FY 2000 funding request for the Department's Energy Efficiency and Renewable Energy programs includes an increase of $209 million for a total of $1.2 billion. Key results supported by the FY 2000 budget request include:

- **Power.** Improve the performance, reduce the cost, and perform highly leveraged field verifications of technologies that generate electricity from renewable energy resources in a highly competitive, restructured utility environment. Power Technology programs are expected to replace up to 1.2 Quads of domestic primary energy by clean renewable resources, save consumers $1.4 billion, and reduce annual U.S. carbon emissions by nearly 24 million metric tons of carbon equivalent by 2010. This is roughly equivalent to all the energy used for a year in homes in Texas, our nation's second largest state.
- **Industry.** Develop and facilitate the deployment of energy efficient technologies in partnership with the most energy intensive industries. Investments are expected to save up to 1.5 Quads, $6 billion, and 29 million metric tons carbon equivalent (MMTCE) annually by 2010. This is roughly equivalent to all the industrial energy used for a year in Pennsylvania, the fifth largest state in the nation.
- **Transportation.** The Partnership for a New Generation of Vehicles (PNGV) will support development of technologies needed for an 80 mpg family automobile, and more efficient small and heavy trucks. DOE Transportation programs are expected to save up to one million barrels per day of oil, $9.9 billion, and reduce carbon 25 MMTCE annually by 2010. This is roughly equivalent to the oil-based fuels used in a year for transportation in Florida, the third largest state in the nation.
- **Buildings.** Work with industry, states, and other key partners to develop and implement energy efficient buildings and building technologies and programs leading to savings of up to 2.3 Quads, $16 billion, and 36 MMCTE annually by 2010. This is roughly equivalent to all residential and commercial building energy use in Texas in a year. In addition, the program will weatherize nearly 77,000 low income homes.
- **FEMP.** Accelerate efforts to deliver federal energy savings through $5 billion worth of Energy Savings Performance Contracts (ESPCs) with the private sector under the Federal Energy Management Program (FEMP). Also accelerate utility financing and procurement of energy efficiency products to achieve a 30 percent reduction in federal energy efficiency. FEMP programs are expected to save up to 0.1 Quads, $400 million, and 1.2 MMCTE annually by 2010.

Fossil Energy

The FY 2000 Fossil Energy R&D request is $364 million, which includes the use of $11 million in prior year balances for a total operating budget of $375 million, a decrease of 2.4%. One of the key components of the Fossil Energy R&D request is the development of the "Vision 21 Powerplex"—the power plant of the future. This includes modular technologies that could be integrated into a non-polluting energy producing facility, such as membranes for the low-cost separation of oxygen and other gases. The high efficiency of Vision 21 Plants (60 percent for coal and 75 per-

cent for gas) could, by 2030, reduce greenhouse gas emissions globally by 370 million tons of carbo per year. Sequestration R&D could lead to low cost options for reducing U.S. emissions by an additional 250 million tons of carbon during the same time frame. The economic benefits of Vision 21 Plants, through savings in electricity costs to consumers, could reach $5-15 billion annually by 2030. In addition, lower cost emission control technologies could save $5 billion annually by 2010.

Within the Clean Coal Technology Program, the Department is requesting the net deferral of $246 million in funding until FY 2001 and beyond. This is due to changes in project plans for pending projects that do not need to be funded at previously expected levels at this time. During FY 2000, the Department expects to complete demonstration of the third integrated gasification combined cycle project at Pinion Pine and to continue operations at the Polk project. Activities at these two Clean Coal Technology projects will provide the engineering foundation for a new generation of powerplants with efficiencies in the 60 % range.

We have also proposed $164 million to operate America's energy security insurance policy—the Strategic Petroleum Reserve—without selling oil, including $5 million to ensure adequate resources to operate the Reserve at its maximum draw down rate during an emergency. We recently announced programs to use royalty oil and facility leasing to increase the amount of oil stored in the Reserve. In addition, we are completing upgrades of Reserve facilities, and by the end of FY 2000, the Strategic Petroleum Reserve will have completed a comprehensive systems refurbishment to assure physical system capability through the year 2025.

Key results supported by the FY 2000 budget request include:

- **Coal R&D.** Start construction of a clean, advanced coal fire power system—part of the final phase of the Low Emissions Boiler Program (LEBS) to be completed in 2001. The system will use newly developed high temperature filtration processes for superior environmental performance and provide the foundation for a new generation of highly efficient, supercritical steam power plants. Complete subscale testing of a high temperature air furnace technology for use in highly efficient, indirectly-fired combustion power systems and in Vision 21 Power Plexes. Complete initial laboratory tests of novel gaseous separation (O2, H, CO2) technologies to provide low cost options for Vision 21 Power Plexes. Identify candidates for low-cost gas purification technologies to support zero emissions goal of Vision 21 Power Plexes.
- **Natural Gas and Oil R&D.** Continue the scale-up development of ceramic membranes for gas-to-liquids processing; continue implementing the President's Committee of Advisors on Science and Technology (PCAST) recommendation for a methane hydrates recovery program; and continue development of advanced diagnostics and imaging technologies for highly fractured and bypassed gas reservoirs and endangered domestic oil reserves. Continue support for National Laboratory partnerships with industry and the Petroleum Technology Transfer Council. Initiate Preferred Petroleum Upstream Management Practices (PUMP). Continue a restructured advanced gas turbine program for the 2001 introduction of "quantum leap" turbines, continue scale-up tests of a solid oxide fuel cell, and continue cost-reduction R&D for molten carbonate fuel cell technologies.
- **Naval Petroleum and Oil Shale Reserves.** Continue to operate NPR3 and to finalize equity determination activities on NPR1.
- **Strategic Petroleum Reserve.** Maintain a highly reliable level of operational readiness. Complete oil skimming and decommissioning at Weeks Island. Initiate the long term monitoring of Weeks Island to assure mine stability. Test major SPR systems in the post-Life Extension program era at all sites. The addition of $5 million to the SPR Petroleum Account will assure the capability to sustain drawdown operations.
- **Clean Coal Technology.** Continue prior cost-shared commitments to 20 projects projected to be active in FY 2000.

Nuclear Energy

The FY 2000 request for Nuclear Energy programs is $269.3 million, a $6 million increase from FY 1999. The Department's request includes $25 million for the "Nuclear Energy Research Initiative." NERI supports peer-reviewed research and development in advanced technologies that can address some of the barriers to the long-term use of nuclear power in the United States. NERI will explore advanced technologies associated with areas such as proliferation-resistant reactor and fuel technologies, small and high efficiency reactor systems, and methods for greatly enhancing safety and minimizing wastes. The Nuclear Energy request also includes $30 million for the Fast Flux Test Facility at the Department's Hanford Reservation. The Department is currently evaluating future missions for the reactor and will

make a decision this spring on the future of the reactor. Funding at the request level would be adequate to fund minimum surveillance and maintenance to keep it in a safe and environmentally-compliant condition.

The Department is also evaluating the potential application of electrometallurgical treatment technology to some of our spent fuel challenges. Any decision to use this technology will be based, in part, on the results of an ongoing National Research Council review, as well as on the completion of an Environmental Impact Statement. The FY 2000 budget provides limited funding for this technology pending completion of this evaluation.

The Nuclear Energy budget also supports the Department's radioisotope power system production capability. These power systems are used by NASA and other government agencies for deep space probes and other remote power applications. The Department has adopted a strategy wherein the our budget is used only to maintain physical and institutional capability to manufacture these systems, while the cost of production will be charged to its federal agency "customers." DOE is the only source of these power science and technology systems, and the nation's ability to explore deep space depends on the availability of these systems.

The Nuclear Energy budget also supports production and distribution of isotopes for medicine and research where no commercially available alternatives exist. The FY 2000 budget request proposes to launch the Advanced Nuclear Medicine Initiative, to apply our unique expertise and capabilities in isotopes to advance nuclear medicine technology. This initiative sponsors peer-reviewed research that would include using the Department's large inventory of alpha-emitting isotopes to fight a wide spectrum of illnesses.

The Office of Nuclear Energy has primary responsibility within the Department for implementation of Public Law 105-204, which requires the Department to prepare a plan to begin construction of two depleted uranium hexafluoride conversion plants at Portsmouth, Ohio and Paducah, Kentucky by January 31, 2004. Depleted uranium hexafluoride is a residual product created from the operation of uranium enrichment plants formerly operated by the Department and now operated by the privatized U.S. Enrichment Corporation. The Department expects to publish a formal solicitation for expressions of interest (EOI) in construction of these plants within the next week. The Office of Nuclear Energy is currently working to complete the statutorily required plan to support plant construction. The Department expects to transmit the final plan to the Congress this spring once responses are received from the EOI.

Key results supported by the FY 2000 budget request include:

- Solve critical technology issues with existing nuclear plants.
- Conduct investigator-initiated, peer-reviewed innovative nuclear energy research and development.
- Optimize the capability of existing nuclear power plants to contribute to the reduction in U.S. CO2 emissions.
- Develop and produce vital medical, research, and industrial isotopes and their related applications.
- Maintain the capability to produce safe nuclear power systems and related technologies for future space exploration.
- Support research and education programs at U.S. universities through grants, fellowships, and scholarships.
- Manage Nuclear Energy facilities and DOE research reactors in a safe, economical, and environmentally sound manner.
- Develop advanced technologies to treat DOE spent fuel.
- Implement a long-term management strategy for the Department's depleted uranium hexafluoride inventory.
- Maintain and/or deactivate the Department's surplus non-weapons nuclear reactor sites.

ENVIRONMENTAL QUALITY

Environmental Management

The Department is requesting $5.9 billion for the Office of Environmental Management, including privatization, or roughly $100 million more than the current year. Of this amount, all but $571 million is funded under "Atomic Energy Defense Activities" as part of the Nation's defense budget. The civilian portion of the budget request includes environmental management activities at the Department's civilian research and production facilities as well as funding for the Department's statutory obligations for environmental restoration work at the West Valley facility in New York, uranium mill tailings sites, and uranium enrichment facilities.

The FY 2000 request reflects our effort to maintain a stable program that provides sufficient resources to meet our multiple demands of risk reduction, compliance and mortgage reduction. Because of the complexity of the cleanup and waste treatment operations, reliable and sustained funding is essential for performing the extraordinarily complex planning required for these long-lead time projects. The commitments based on this budget will be accelerated cleanup and closure, deployment of new technologies, and progress in resolving the nuclear waste backlog. We have set very ambitious goals for closing several sites by the year 2006, including a number of major non-defense projects including the Weldon Spring Site in Missouri, the Battelle Columbus Laboratory and the Mound Plant in Ohio, and the Energy Technology Engineering Center in California.

By working towards our goal for cleanup, we not only reduce the hazards presently facing our workforce and the public, but also reduce the long-term financial burden on the taxpayer. For every year that a site remains open because cleanup has not been completed, we are paying a "mortgage" of necessary overhead for activities such as site security, facility operations, personnel, safety and other costs. By completing cleanup sooner, particularly at sites where we have no other continuing missions, we can substantially reduce these overhead costs. The FY 2000 budget request is now fully structured to emphasize site closure and project completion.

We have made substantial progress towards this vision. We are completing site cleanups. In FY 1998, we finished cleanup of an entire class of nuclear waste sites—uranium mill tailings sites. Except for remaining ground water contamination, we completed cleanup of 22 large uranium mill tailings sites as well as 5,300 "vicinity properties," including elementary schools and homes. This project included remediation of over 40 million cubic yards of contaminated soil and material, a volume that would cover a football field with a mound of dirt four miles high. Also in FY 1998, we completed the primary vitrification campaign of the high-level wastes at the West Valley Demonstration Project in New York, ahead of schedule, and have begun the vitrification of high-level waste tank heels which will continue through FY 2001.

I previously discussed the Department's responsibility for construction of conversion plants for depleted uranium hexafluoride resulting from the operation of uranium enrichment plants at Paducah, Kentucky and Portsmouth, Ohio. Decontamination and decommissioning of the uranium enrichment plants themselves, including a third plant located at Oak Ridge, Tennessee are funded out of the Uranium Enrichment Decontamination and Decommissioning Fund established by the Energy Policy Act of 1992. This fund also is used to reimburse private-sector companies operating uranium and thorium processing sites for specified costs of environmental cleanup within statutorily defined limitations. The Departments FY 2000 request for these activities is $240.2 million—a $20 million increase over the current year. The increase is entirely within the uranium enrichment portion of the fund.

Within the Defense Environmental Management account, we are continuing work on the clean up of the Department's nuclear weapons complex. We continue to have a goal of cleaning up several major sites, including Fernald, Rocky Flats, and Mound, by the end of FY 2006, and to reduce the life-cycle cost of completing clean up activities at our other environmental management sites. We are also continuing with privatization projects at Carlsbad, Hanford, Idaho, and Oak Ridge. The Department will be submitting shortly its annual report to the Congress on the status of these privatization projects.

The Office of Environmental Management has been playing a lead role in the Department-wide effort to use roadmapping techniques to improve the way we develop and manage science and technology programs. EM has constructed science and technology roadmaps at three levels: overall EM investments in science and technology have been mapped in the *EM R&D Program Plan* that was released in November 1998; five problem area roadmaps have been built at the Focus Area level; and a number of project level roadmaps have been developed, e.g., Hanford Vadose Zone and Salt Treatment Alternatives at the Savannah River Site.

EM is applying systems engineering principles to develop these roadmaps on an integrated, complex wide basis. This complex-wide integration effort, championed by five Field Office Managers and the EM Assistant Secretary, was a winner of the 1998 Government Technology Leadership Award, sponsored by *Government Executive* magazine. Complex-wide integration activities, combined with science and technology roadmapping efforts, will strengthen the scientific and technical underpinnings of the EM program and ultimately reduce the cost of the cleanup effort.

Office of Civilian Radioactive Waste Management

In December 1998, the Department completed, and submitted to the President, the Congress, and the public the Viability Assessment of a repository at Yucca

Mountain. This assessment assembled, for the first time, information about all major elements of the site and proposed repository design. Based on the results of the Viability Assessment, the Department believes the scientific and technical work at Yucca Mountain should proceed to support a decision by the Secretary of Energy in 2001 on whether to recommend the site to the President for development as a geological repository. The assessment also included a preliminary baseline design, cost and schedule for completion of the proposed repository. For FY 2000, the Department is requesting $409 million, an increase of $51 million over the current fiscal year to fund the additional cost of these efforts. This includes $39 million of the $85 million reserved in the fiscal year 1996 Defense Nuclear Waste Appropriation. These funds will support continuation of technical evaluation of the site and refinement of engineering and design for the repository.

Under the current schedule, the Department would also complete and issue the Final Environmental Impact Statement for the repository in the year 2000. If the site is suitable, the formal recommendation of the site to the President would be made in 2001 and submission of the license application to the Nuclear regulatory Commission would occur in 2002.

SCIENCE

As I said earlier, the Department of Energy is, at its heart, a science and technology agency. Science and technology are not merely parts of this Department, they are the foundation on which all the Department's work is based. Our request for science funding for FY 2000 is $2.8 billion, an increase of $138 million. Included in this amount is $70 million for the Department's role in the President's Information Technology for the 21st Century initiative. This investment will enable us to develop and deploy new, far faster computers for advanced simulation. We call it the "Scientific Simulation Initiative," or "SSI." Our goal is to develop a multi-tera scale national computing infrastructure for solving complex scientific and engineering problems of national importance. We expect that this initiative, over the next five years, will elevate simulation to a discovery tool alongside experimentation and theory.

These new simulation capabilities will be powerful tools to do things like design new, clean combustion devices, develop new pharmaceuticals, explore new materials, and improve our weather and climate research, reaffirming America's leading role in these fields.

We will continue investing in other science programs that will have far reaching benefits to all of the country's and the Department's research agenda. For example, we are continuing development of the Spallation Neutron Source (SNS) at the Oak Ridge National Laboratory. This state of the art neutron scattering facility will lead to the development of stronger and lighter materials, more efficient motors, and increase our understanding of the structure of matter. The SNS is essential for restoring American leadership in neutron scattering, a core capability for materials science.

It is important to emphasize here the contributions that the Science program makes not only to the advancement of basic sciences in this country and the continuation of U.S. scientific leadership, but also the direct impact the science program has on the other three missions of the Department of Energy. Energy Resources, Environmental Quality, and National Security are all the beneficiaries of the steady stream of discoveries and expertise from the DOE laboratory system, and from the universities and industries who perform work funded by DOE.

DEPARTMENTAL ADMINISTRATION

The offices funded under the Departmental Administration appropriations account provide headquarters with guidance and support of all operating elements of the Department including such as areas as human resources, administration, accounting, budgeting, legal services, information management systems, congressional liaison and public affairs. Management of program activities is funded by program direction funding within each program budget. The Department is requesting $247.5 million dollars for Departmental Administration, a $2.9 million decrease.

MANAGEMENT

Working with Congress, we have reduced our Federal employee workforce by 25 percent in less than four years. We've also reduced our contractor employment by 31 percent since its peak in 1992. But this streamlining has left gaps in important skill areas. To resolve this, in December, Secretary Richardson announced a targeted effort to bring specialized skills into the Department as part of his "Workforce 21" initiative. One of the first steps taken was the development of an R&D Tech-

nical Managers Initiative, which now includes a detailed action plan for improving R&D technical management, to ensure the Department has the essential expertise to carry out our missions in the future.

We are also taking a comprehensive look at the structure of the Department, looking for ways to improve efficiency, strengthen management, ensure accountability, and improve reporting requirements. For example, we have restructured the Research and Development Council, which I chair, to integrate our research activities across the Department. We have also reinvigorated the Laboratory Operations Board to ensure that our government-owned, contractor-operated laboratories are being managed effectively and are fully accountable to the Department.

CONCLUSION

The Department's FY 2000 budget request of $17.8 billion will, if funded, allow the Department to serve the American people effectively, in pursuit of its core missions:

- Advancing the frontiers of science and technology;
- Ensuring the security, diversity and affordability of America's energy resources;
- Promoting national security, and keeping our nuclear weapons stockpile safe, secure, and reliable; and
- Cleaning up the environmental legacy of the Cold War.

The budget we have submitted attempts to balance many competing demands from the scientific community, from industry, and from communities that surround and host our facilities, within current budgetary constraints. We believe that this budget, along with some of the essential policy initiatives I have outlined, achieves this balance, and we ask for your support.

Thank you again for the opportunity to testify this morning. I would be pleased to answer any questions the Subcommittee has regarding the FY 2000 budget.

U.S. Department of Energy

Office of Nonproliferation and National Security

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Research and Development	$210.0	$221.0	$+11.0
Arms Control	256.9	296.0	+39.1
International Nuclear Safety	30.0	34.0	+4.0
HEU Transparency Implementation	13.6	15.8	+2.2
Nuclear Safeguards	55.2	59.1	+3.9
Security Investigations*	30.0	30.0	0.0
Emergency Management	21.0	21.0	0.0
Program Direction	80.4	90.4	+10.0
Subtotal	$697.1	$767.3	+$70.2
Use of Prior Year Balances	-6.2	—	+6.2
Offset to user organizations	-20.0	-20.0	0.0
TOTAL, Nonproliferation	$670.9	$747.3	$+76.4

*Program Offices are providing funding for Security Investigations to be used for all contractor personnel in the field. For FY 1999, $20 million appropriated, plus $15 million per Congressional Notification letter; and for FY 2000, a request of $20 million.

KEY RESULTS SUPPORTED BY FY 2000 BUDGET

- Increases nuclear safety and threat reduction assistance to Russia and maintains cooperation with the Newly Independent States (NIS) and Baltics to secure and prevent the spread of Special Nuclear and other Weapons of Mass Destruction materials and expertise.
- Continues development of technology upgrades for Comprehensive Test Ban Treaty monitoring and verification.
- Accelerates research and development of technologies for domestic response to chemical and biological weapons threats.
- Sustains Nuclear Safeguards and Security and Emergency Management Programs, and supports Critical Infrastructure Program.

- Protects against inadvertent release of Restricted Data and Formerly Restricted Data (P.L. 105-261), and continues the declassification process while protecting our national security.

U.S. Department of Energy

Office of Nuclear Energy, Science and Technology

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Nuclear Energy Research & Development			
Advanced Radioisotope Power Systems	$37.0	$37.0	$0.0
Test Reactor Area & Landlord Functions	6.8	9.0	+2.2
University Reactor Fuel Assistance and Support	11.0	11.3	+0.3
Nuclear Energy Plant Optimization (NEPO)	—	5.0	+5.0
Nuclear Energy Research Initiative (NERI)	19.0	25.0	+6.0
Total, Nuclear Energy R&D	73.8	87.3	+13.5
Fast Flux Test Facility	30.0	30.0	0.0
Termination Costs	85.0	65.0	-20.0
Uranium Programs	35.4	41.0	+5.6
Isotope Production & Distribution	21.5	21.0	-0.5
Program Direction	21.2	25.0	+3.8
Subtotal, Nuclear Energy	266.9	269.3	+2.4
Use of Prior Year Balances	-3.5	0.0	+3.5
TOTAL, Nuclear Energy	$263.4	$269.3	$+5.9

KEY RESULTS SUPPORTED BY FY 2000 BUDGET

- Solve critical technology issues associated with existing nuclear plants.
- Conduct investigator-initiated, peer-reviewed innovative nuclear energy research and development.
- Optimize the capability of nuclear power plants to contribute to the reduction in U.S. CO2 emissions.
- Develop and produce vital medical, research, and industrial isotopes and their related applications.
- Maintain capability to produce safe nuclear power systems and related technologies for future space exploration.
- Support research and education programs at U.S. universities through grants, fellowships, and scholarships.
- Manage Nuclear Energy facilities and DOE research reactors in a safe, economic, and environmentally sound manner.
- Develop advanced technologies to treat DOE spent fuel.
- Implement long-term management strategy for the Department's depleted uranium hexafluoride inventory.
- Maintain and/or deactivate the Department's surplus nonweapons nuclear reactor sites.

U.S. Department of Energy

Office of Defense Programs

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Stockpile Stewardship			
Core Stockpile Stewardship	$1,012.0	$1,153.9	$+141.9
ASCI/Stockpile Computing	483.8	542.5	+58.8
Inertial Confinement Fusion	503.4	465.7	-37.7
Technology Partnerships	43.0	22.2	-20.8
Education	19.0	29.8	+10.8

U.S. Department of Energy—Continued

Office of Defense Programs

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Infrastructure Construction	64.7	72.1	+7.4
Subtotal, Stockpile Stewardship	2,125.9	2,286.2	+160.3
Stockpile Management			
Core Stockpile Management	1,639.4	1,552.0	-87.4
Enhanced Surveillance	81.5	85.3	+3.8
Advanced Manufacturing	79.5	85.0	+5.5
Radiological/Nuclear Accident Response	76.2	77.6	+1.4
Tritium Source	167.0	170.0	+3.0
Materials	27.9	28.4	+0.5
Subtotal, Stockpile Management	2,071.5	1,998.3	-73.2
Program Direction	249.6	246.5	-3.1
Subtotal, Weapons Activities	4,447.0	4,531.0	+84.0
Use of Prior Year Balances	-47.0	0.0	+47.0
TOTAL, Weapons Activities	$4,400.0	$4,531.0	$+131.0

Key Results Supported by FY 2000 Budget

- Maintain confidence in the safety and reliability of the nuclear weapons stockpile without nuclear testing
- Initiate manufacture of W88 pits for enduring stockpile
- Maintain National Ignition Facility schedule
- Demonstrate three-dimensional analysis of specific behavior of a nuclear weapon primary
- Execute two subcritical experiments
- Dismantle approximately 375 weapons
- Begin implementation of the Secretarial decision to produce tritium in a TVA reactor including the start of construction of the tritium extraction facility and maintaining an accelerator as a backup

U.S. Department of Energy

Office of Worker and Community Transition

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Work Force Restructuring	$9.4	$9.4	$0.0
Community Transition Assistance	16.6	17.1	+0.5
Program Direction	3.9	3.5	-0.4
Subtotal, Worker & Community Transition	$29.9	$30.0	$0.1
Use of Prior Year Balances	-1.7	0.0	+1.7
TOTAL, Worker and Community Transition	$28.2	$30.0	$+1.8

Key Results Supported by FY 2000 Budget

- Manage the Department's efforts to restructure its contractor work force during FY 2000.
- Provide enhanced separation benefits to workers separated from former defense nuclear program activities.

- With community assistance, create 1,700 new jobs through expansion of existing businesses or new business starts within communities affected by the Department of Energy's work force restructuring.
- Support renegotiation or renewal of 25 collective bargaining agreements throughout the Department of Energy complex and assist field organizations in labor/management relations and negotiations.
- Stimulate efforts to dispose of unnecessary assets and reuse existing facilities.

U.S. Department of Energy

Office of Energy Efficiency & Renewable Energy

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Power Technologies (formerly Utilities)	$272.3	$325.2	$+52.9
Industry Technologies	165.9	171.0	+5.1
Transportation Technologies	243.8	305.5	+61.7
Building Technologies, States & Communities	262.2	335.9	+73.7
Federal Programs	23.8	31.9	+8.1
Program Management	59.7	66.9	+7.2
Subtotal, Energy Efficiency & Renewable Energy	$1,027.7	$1,236.4	$+208.7
Use of prior year balances	-64.0	-0.8	+63.2
Total, Energy Efficiency & Renewable Energy	$963.7	$1,235.6	$271.9

KEY RESULTS SUPPORTED BY FY 2000 BUDGET

- **Power**—(formerly Utilities) Improve the performance, reduce the cost, and perform highly-leveraged field verifications of technologies that generate electricity from renewable energy resources in a highly-competitive, restructured utility environment. Power Technology programs are expected to replace up to 1.2 Quads of domestic primary energy by clean renewable resources, save consumers $1.4 billion, and reduce annual U.S. carbon emissions by nearly 24 million metric tons by 2010, roughly equivalent to all the energy used for a year in homes in Texas, our nation's second largest state.
- **Industry:** Develop and facilitate the deployment of energy efficient technologies in partnership with the most energy intensive industries. Investments are expected to save up to 1.5 Quads, $6 billion, and 29 million metric tons carbon equivalent (MMTCE) annually by 2010, roughly equivalent to all the industrial energy used for a year in Pennsylvania, the fifth largest state in the nation.
- **Transportation:** The Partnership for a New Generation of Vehicles (PNGV) will support development of technologies needed for an 80 mpg family automobile, and more efficient small trucks and heavy trucks. DOE Transportation programs are expected to save up to 1 million barrels/day of oil, $9.9 billion, and reduce carbon 25 MMTCE annually by 2010, roughly equivalent to the oil based fuels used for a year for transportation in Florida, the third largest state in the nation.
- **Buildings:** Work with industry, states, and other key partners to develop and implement energy efficient buildings and building technologies and programs leading to savings of up to 2.3 Quads, $16 billion, and 36 MMTCE annually by 2010. This is roughly equivalent to all residential and commercial building energy use in Texas in a year. In addition, the program will weatherize nearly 77,000 low income homes.
- **FEMP:** Accelerate efforts to deliver federal energy savings through $5 billion worth of Energy Savings Performance Contracts (ESPCs) with the private sector. Also accelerate utility financing and procurement of energy efficiency products to achieve 30 percent reduction in federal energy efficiency. FEMP programs are expected to save up to 0.1 Quads, $400 million, and 1.2 MMTCE annually by 2010.

U.S. Department of Energy

Office of Fossil Energy

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Fossil Energy Research and Development			
Coal	$123.1	$122.4	$-0.7
Petroleum	48.6	50.2	+1.6
Gas	115.2	105.3	-9.9
Management & Other	97.1	97.1	0.0
Subtotal, Fossil Energy R&D	384.0	375.0	-9.0
Naval Petroleum & Oil Shale Reserves	20.7	21.2	+0.5
Elk Hills School Lands Fund	36.0	36.0	0.0
Strategic Petroleum Reserve	160.1	164.0	+3.9
Subtotal, Fossil Energy	$600.8	$596.2	-$4.6
Use of prior year balances & other	-7.9	-33.2	-25.3
Clean Coal Technology Program	-40.0	-246.0	-206.0
TOTAL, Fossil Energy	$552.9	$317.0	$-235.9

KEY RESULTS SUPPORTED BY FY 2000 BUDGET

- **Coal R&D**—Start construction of clean, advanced coal fire power system-part of the final phase of the Low Emissions Boiler Program (LEBS) to be completed in 2001. The system will use newly developed high temperature filtration processes for superior environmental performance and provide the foundation for a new generation of highly efficient supercritical steam power plants. Complete subscale testing of high temperature air furnace technology for use in highly efficient indirectly-fired combustion power systems and in Vision 21 Power Plexes. Complete initial lab tests of novel gaseous separation (O2, H, CO2) technologies to provide low cost options for Vision 21 Power Plexes. Identify candidates for low-cost gas purification technologies to support zero emissions goal of Vision 21 Power Plexes.
- **Natural Gas and Oil R&D**—Continue scale-up development of ceramic membrane for gas-to-liquids processing; continue implementing President's Committee of Advisors on Science and Technology (PCAST) recommendation for methane hydrates recovery program and continue development of advanced diagnostics and imaging technologies for highly fractured and bypassed gas reservoirs and endangered domestic oil reservoirs. Continue support for National Lab partnerships with industry and for Petroleum Technology Transfer Council. Initiate Preferred Petroleum Upstream Management Practices (PUMP).
- Continue restructured advanced gas turbine program for 2001 introduction of "quantum leap" turbine, continue scale-up tests of solid oxide fuel cell, and continue cost-reduction R&D for molten carbonate fuel cell technologies.
- **Naval Petroleum and Oil Shale Reserves**—Continue to operate NPR3 and to finalize equity determination activities on NPR1.
- **Strategic Petroleum Reserve**—Maintain a highly reliable level of operational readiness. Complete Weeks Island oil skimming and decommissioning. Initiate long term monitoring of Weeks Island to assure mine stability. Test major SPR systems in the post-Life Extension program era at all sites. The addition of $5 million to the SPR Petroleum Account assures the capability to sustain drawdown operations until sales receipts are available.
- **Clean Coal Technology**—Continue prior cost-shared commitment to 20 projects projected to be active in FY 2000.

U.S. Department of Energy

Office of Environmental Management

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999* Comparable Approp.	FY 2000 Request	Change
Site Closure	$1,290.2	$1,265.6	$-24.6
Site/Project Completion	1,141.1	1,081.8	-59.3
Post 2006 Completion	2,403.9	2,532.5	+128.6
Science and Technology	243.2	230.5	-12.7
UE D&D Fund	220.2	240.2	+20.0
Privatization	228.4	253.0	+24.6
Program Direction	337.1	349.4	+12.3
Subtotal, Environmental Management	5,864.1	5,953.0	+88.9
Uncosted Offset	-32.1	-25.0	+7.1
TOTAL, Environmental Management	$5,832.0	$5,928.0	$+96.0

*Includes FY 1999 Emergency Supplemental funding of $13.8 million to correct year 2000 computer problems.

KEY RESULTS SUPPORTED BY FY 2000 BUDGET

- Accelerate clean up at as many sites as possible by 2006, reducing risks to workers, public health, and the environment.
- Pursue accelerated closure of three major sites: Rocky Flats, Fernald, and Mound.
- Provides for the first full year of operation of the Waste Isolation Pilot Plant (WIPP) by receiving waste from multiple sites across the country for permanent disposal. Transuranic waste will be received from New Mexico, Idaho, Colorado, South Carolina, Washington, Ohio, and Illinois.
- Continue EM's contracting strategy of privatizing clean up activities at multiple sites.
- Support aggressive efforts to deploy new, efficient technologies to accelerate clean up schedules, and produce significant cost savings.
- Vitrify between 100 and 105 canisters of high-level waste at the Savannah River Site, South Carolina and in West Valley, New York

U.S. Department of Energy

Office of Environment, Safety and Health

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Technical Assistance	$50.4	$50.8	$+0.4
Health Studies	78.5	86.5	+8.0
Oversight	25.0	25.5	+0.5
Subtotal, Environment, Safety and Health	$153.9	$162.8	$+8.9
Use of Prior Year Balances	-5.1	-8.7	-3.6
Total, Environment, Safety and Health	$148.8	$154.1	+$5.3

KEY RESULTS SUPPORTED BY FY 2000 BUDGET

- Technical Assistance: Technical experts in fields of nuclear safety engineering, occupational safety, radiation protection and other environment, safety and health disciplines work with DOE line programs to solve critical problems and develop programs to prevent injuries, illnesses, environmental contamination, and to comply with all environmental laws and regulations
- Health Studies: Continue research on the effects of radiation on humans; epidemiological studies on occupational diseases; and studies to determine potential health effects to workers and community residents exposed to hazardous mate-

rials from DOE operations. This year includes funding for the Department of Health and Human Services to conduct health studies previously funded by the Office of Environmental Management.

- Oversight: Perform independent oversight to appraise the effectiveness of environment, safety, health, safeguards, and security programs, and follow-up with corrective actions. Administer enforcement programs to assure DOE contractors adhere to safety rules.

U.S. Department of Energy

Office of Science

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Basic Energy Sciences	$799.5	$888.1	$+88.6
Biological and Environmental Research	436.7	411.2	-25.5
Less One Time Projects	-46.8	0.0	+46.8
Total BER Base	389.9	411.2	+21.3
Fusion Energy Sciences	222.6	222.6	0.0
Computational and Technology Research	157.5	198.9	+41.4
High Energy Physics	695.5	697.1	+5.5
Nuclear Physics	334.6	342.9	+4.5
Multiprogram Energy Labs & Other	72.1	74.6	+2.5
Subtotal	2,718.5	2,835.4	+117.2
General Reduction/Use of Prior Year Balances	-13.0	0.0	+13.0
Superconducting Super Collider (SSC) Balances	-7.6	0.0	+7.6
TOTAL, Science	$2,697.9	$2,835.4	$+137.8
Technical Information Management	$8.6	$9.1	$+0.8

KEY RESULTS SUPPORTED BY FY 2000 BUDGET

- Begin the "Scientific Simulation Initiative," a critical element in the President's Information Technology for the 21st Century program, in partnership with NSF and other agencies (NASA, DOD, NOAA, NIH); an integrated initiative in computer simulation and modeling that builds upon, and is integrated with Accelerated Strategic Computing Initiative (ASCI) capabilities.
- Increase Climate Change Technology Initiative research in carbon management science, in relation to DOE's technology programs which are directed at the themes of science for efficient technologies, fundamental science underpinning advances in all low/no-carbon energy sources and sequestration science.
- Continue construction of the Spallation Neutron Source at Oak Ridge National Laboratory to regain our position of international leadership in neutron sources used for physical, chemical, materials, biological, and medical research. This $1.3 billion facility involves DOE leadership of an interlaboratory effort (ORNL, LBNL, LANL, BNL, and ANL).
- Maintain scientific user facilities by providing operating time and user support for over 15,000 scientists in universities, federal agencies, and industry.
- Continued participation in the President's Next Generation Internet initiative, the Partnership for New Generation of Vehicles, DOE 2000, genome and global climate change.
- $32 million for carbon management science, including using microbial genomics to find ways to sequester carbon for potential greeenhouse gas reduction.

U.S. Department of Energy

Office of Fissile Materials Disposition

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Future Storage	$0.9	$4.3	$+3.4

U.S. Department of Energy—Continued

Office of Fissile Materials Disposition

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Disposition	86.0	95.0	+9.0
Facility Design	48.0	62.9	+14.9
U.S./Russian Activities	24.9	24.9	0.0
Core Technologies	2.7	2.3	-0.4
NEPA Compliance	1.9	3.3	+1.4
Program Direction	4.6	7.3	+2.7
Use of Prior Year Balances	-1.5	0.0	+1.5
TOTAL, Fissile Materials Disposition	$167.5	$200.0	$-32.5
Russian Plutonium Disposition	200.0	0.0	-200.0

KEY RESULTS SUPPORTED BY FY 2000 BUDGET

- Complete Title I and initiate Title II designs of Pit Disassembly and Conversion Facility and Mixed Oxide (MOX) Fuel Fabrication Facility
- Initiate Title I design of an Immobilization and Processing Facility
- Begin implementation of U.S./Russian accord for plutonium disposition in Russia
- Continue Phase II testing of integrated prototype for pit disassembly and conversion
- Upgrade surplus pit storage facilities at Pantex
- Continue disposition of surplus highly enriched uranium (HEU)
- Issue a draft environmental impact statement on disposition of U^{233}

U.S. Department of Energy

Office of Civilian Radioactive Waste Management

FY 2000 Congressional Budget Request

[Dollars in Millions]

Program	FY 1999 Comparable Approp.	FY 2000 Request	Change
Yucca Mountain Site Characterization	$282.4	$331.7	$+49.3
Waste Acceptance, Storage and Transportation	1.9	5.7	+3.8
Accelerator Transmutation of Waste	4.0	—	4.0
Management Functions	69.7	71.6	+1.9
Subtotal	358.0	409.0	+51.0
Less the Use of Previously Appropriated Funds	-0.5	-39.0	-38.5
TOTAL, Civilian Radioactive Waste Management	$357.5	$370.0	$12.5

KEY RESULTS SUPPORTED BY FY 2000 BUDGET

The FY 2000 budget requests $370 million in new budget authority and assumes that $39 million of the $85 million reserved in the FY 1996 Energy & Water Development Appropriations Act (P. L. 104-46) will be made available by Congress. The total program funding request of $409 million in FY 2000 supports activities necessary to be completed in time to determine the suitability of the Yucca Mountain site as a repository, develop the documentation needed for a Secretarial decision on the Site Recommendation to the President in FY 2001, and conduct other activities associated with the federal government's waste acceptance obligations.

Yucca Mountain Site Characterization Project in FY 2000 will:

- Select the natural system reference models to support a decision on whether to recommend the Site to the President and the License Application.
- Select the reference repository and waste package designs to support a decision whether to recommend the Site to the President and the License Application.

- Complete and issue the final Environmental Impact Statement.
- Continue the evaluation of this site for compliance with 10 CFR Part 960, the Department of Energy's repository siting guidelines.
- Initiate development of the documentation to support a Secretarial decision on Site Recommendation.

Waste Acceptance, Storage, and Transportation activities will focus on:

- Development of processes for the legal and physical transfer of commercial spent nuclear fuel to the federal government.
- Pre-licensing discussions with the Nuclear Regulatory Commission for a non-site-specific interim storage facility.
- Updating a Request for Proposal scheduled for issuance in FY 2001 for acquisition of waste acceptance and transportation services.
- Institutional issues of concern to Program stakeholders regarding transportation.

Regulatory Compliance, Program Control, and Management functions include:

- Nuclear quality assurance, NEPA compliance, and compliance with external regulatory requirements.
- System engineering and integration, program planning, independent technical oversight of critical program elements, validation of repository design concepts and operating strategies, and licensing records management.
- Federal salaries, training, computer applications and information technology.

Mr. BARTON. Thank you, Dr. Moniz.

We've been joined by the distinguished chairman of the full committee, the Honorable Tom Bliley. Does he wish to ask questions first? Mr. Chairman, I've given you the honor, if you wish to be the first questioner.

Mr. BLILEY. Oh, I'll pass.

Mr. BARTON. Okay.

The Chair will then recognize Mr. Norwood—Mr. Norwood's on a tight time schedule and asked if he could go before some of the other subcommittee members.

Mr. Norwood, for 5 minutes, questions only.

Mr. NORWOOD. Thank you very much, Mr. Chairman, and I do appreciate it—the tight schedule is difficult today, and I do have some questions—however, those I have about Tritium and Yucca Mountain, et cetera, I'd like to submit for the record, and concentrate my efforts just a few minutes on the power marketing administration. In particular, my interest is the southeastern power marketing administration, which happens to be the best one, I think—I believe I'm right in saying that out there—at least we tend to generate more than we spend, that's always a good sign.

Mr. BARTON. It's the best one in the Southeast——

Mr. NORWOOD. There's no question you can say that, Mr. Chairman, you're right very often.

Has the gentleman—in either or both—has the administration made an actual policy decision to terminate wholesale power contracts with existing preference customers by, in your budget, having eliminated funding for purchase power and wheeling? Has there been a decision made, a policy decision?

Mr. MONIZ. The budget reflects, clearly, a policy that the PMAs would not need to participate in purchasing power or wheeling services for PMA customers, because the customers can obtain the services themselves, working directly with suppliers. However, since announcing that policy, we have learned that a number of PMA customers believe in an abrupt adoption of this policy——

Mr. NORWOOD. Would you pull that mike just a little closer to you, please?

Mr. MONIZ. Yes. Since that time, we have learned that a number of PMA customers believe that an abrupt adoption of this past will create undue hardships. So we stand ready to work with Congress and PMA customers to develop a workable plan to go forward. The Department is open to new ideas that provide a permanent solution for financing this activity.

If I may, Mr. Norwood, let me ask our CFO, Mike Telson, to amplify on this statement.

Mr. NORWOOD. Thank you. Well, did you say to me you've changed your mind and you're going to change the budget—is that what you said? And then we'll talk about it again under more sensible circumstances.

Mr. TELSON. Mr. Norwood, we're willing to work with you to address any problems that are raised, but if I might take just about a minute to describe what the problem is. Over a number of years, we've been working with our customers to bring down what we call purchase power, using alternate financing techniques—that is, wherever possible where the customers can pay where we get our power from, we would arrange for that to happen, and so get it off our budget book.

The problem that we have is that the purchase power/wheeling expenditures that we have to seek—we have about $50 million or so that are left right now from a peak of much higher a number of years ago—that money has to be sought as a discretionary appropriation, even though that money comes back to us immediately in the form of a reimbursement from our customers.

However, that money goes to the Treasury, it doesn't come to us.

Mr. NORWOOD. In other words, they sell electricity and we put it back into the Treasury.

Mr. TELSON. Correct.

Mr. NORWOOD. I understand.

Mr. TELSON. But we have to take $50 million, roughly, from a very, very tight pot, which you have——

Mr. NORWOOD. I understand.

Mr. TELSON. [continuing] even a worse problem than we do, having to find money within a discretionary pot. So, we have an asymmetry which creates a problem for the Department, creates a problem for the whole budget. Obviously, just the bottom line is that if we don't appropriate the money, it's clear that we can't get the receipts from the purchase power. Right?

Mr. NORWOOD. Right.

Mr. TELSON. Obviously. Yet prior OMB and CBO baselines would have you believe that that was possible. See, that's the situation we encountered when we were preparing this budget. So what we've done is we've taken the lead to work with OMB to prepare a proposal that would rectify the situation by basically taking these receipts out of the base sum, because we're not going to seek an appropriation for that.

Mr. NORWOOD. You know, we all appreciate the problem that you generate the money, it goes to the Federal treasury, and you don't get it back appropriately—I've fussed about that for a long time. In fact, all of us who pay taxes into the Federal treasury have the same problem—we can't seem to get any of it back. But I understand and appreciate where you're coming from, but there are nu-

ances here that will lower the amount that's going into the Federal treasury if you continue down this line, wherever the money's spent, and that's not good, either.

Mr. TELSON. Right.

Mr. NORWOOD. Let me just ask quickly—because we're running out of time—did you check on the law when you made the decision, because it is my understanding that there is some question as to whether the Department of Energy would be able to comply with the Flood Control Act it this amount of appropriations were to stick.

Mr. BARTON. This will have to be the last question——

Mr. TELSON. Yes. Sir, we will work with you to address these issues, because, clearly, it is not in our intent to create problems for you.

Mr. NORWOOD. I didn't think it is, and this isn't hard. All we've got to do is put it back like it was and then—so that we can generate more income for the Federal Treasury.

Mr. TELSON. Right. Maybe, perhaps if the CBO could also adjust their baseline. Maybe this is something to also be looked at.

Mr. NORWOOD. Mr. Chairman, the rest of them I'll put in writing.

Mr. BARTON. Okay, I thank the gentlemen from Georgia. We've commented that I think Bear Bryant had a hat made out of the same cloth that your coat is——

Mr. NORWOOD. Actually, he did, yes.

Mr. BARTON. The Chair would recognize the gentlelady from Missouri for 5 minutes for questions.

Ms. MCCARTHY. Thank you, Mr. Chairman.

Dr. Moniz, I appreciate your remarks with regard to energy efficiency, renewable energy, and—if I might read from your testimony—"to maintain U.S. technological expertise and competitive advantage in global energy technology markets to develop and deploy technologies capable of reducing greenhouse gas emissions."

I cannot find, when I look at the budget, where those numbers are—these are lofty and wonderful words—I happen to believe in them—I happen to think that addressing technology is a win-win for this country. I'd rather see us develop it and export it, than buy it under some foreign country's name as we did with electronic technology in the past in other instances.

But I see the words, I don't see the numbers, and I want to know what you're talking about when you talk about "develop and deploy technologies capable of reducing greenhouse gas emissions."

Could you give me a little more information on that, please?

Mr. MONIZ. Certainly. Thank you for the question.

The portfolio, which will be addressing greenhouse gas emissions, first of all, is very broad, and I will walk through a few of those examples. I do want to also emphasize that without exception, the technologies that we are working on to develop greenhouse gas emission reduction, are simultaneously addressing multiple goals in terms of energy security, clean environment at local levels as well as global levels, et cetera. So these are multipurpose technologies—in particular, of course, efficiency is a technology which serves essentially all of our energy and economic goals.

Ms. MCCARTHY. I'm particularly interested in those technologies that we can export to developing countries—they are an incredibly important component if we are going to address greenhouse gas emissions, we certainly can as a nation, but we need everyone addressing it. And one of the keys to that is to make technologies that are affordable and usable in these developing countries so they can participate in the goals we all seek.

Mr. MONIZ. Yes. There is a very good synergy here, in the sense that, as one develops, for example, renewable technologies, they of course are very environmentally friendly—they are also a technology, because they are often very modular, they depend upon resources which are available in rural areas and in many foreign countries. As we develop those technologies, they will be very important as we evolve to distributed power in this country, as we serve our own rural areas, and provide the basis for what we believe will be an exceptional export market as we serve other countries, for the same reasons.

Ms. MCCARTHY. Are you working with private industry on this—because there are, you know, entrepreneurs all over America trying to accomplish this—this sort of next Silicon Valley approach to the future.

Mr. MONIZ. Yes. The—our energy programs, our energy resource and technology programs—of course, some of the work, particularly the basic—the more basic work—is done to a large extent in our laboratories in some universities. But certainly as we go into the development phase, the applied research phase, a very large fraction of our work is done in cost-shared partnerships with the private sector.

Ms. MCCARTHY. Is there enough money in the budget for this effort? I think it's a critical one.

Mr. MONIZ. Well, the—we have to work, of course, within the overall constraints. We certainly have program pressure that could use more funding. On the other hand, we do have a fairly robust increase in the efficiency and renewable areas, for example—the order of a 20 percent increase in those areas.

Ms. MCCARTHY. Can you get a little more detail to me and anyone else interested on the committee? I know a number of us that, along with the Chairman, went to Kyoto to participate in the protocol effort there, and came away convinced that this could be an economic opportunity for this Nation.

I'd like to know a little bit more—and more detail—just what's going on, so that I can be of assistance in that regard. I don't want to take up the committee's time this morning, but I would like to have more information made available to me about these two important points that you make.

Mr. MONIZ. We would be delighted, of course, to provide you much more detailed briefings at your pleasure. Let me just note that, again, the principal Departmental response in the context of Kyoto, is to develop this robust and broad energy R&D portfolio, developing the new technologies that will provide power, whether it's through higher efficiency in fossil, or through developing renewables, or whether it's developing new modular small nuclear power plants, which may find use elsewhere and of course, have no emissions.

The market for addressing the anticipated very, very large growth in energy use worldwide is enormous. We are talking trillions of dollars, and we believe that these technologies will also give our industries a strong competitive edge.

Ms. MCCARTHY. I just remain concerned that when I couldn't find electronic components made in America, that I don't want to see this happen with our opportunity here, and that's why I keep raising these issues.

Mr. MONIZ. And we agree fully.

Ms. MCCARTHY. These lofty words and these big numbers are great, but I really want to know how we're doing against our competitors out there in the world who are obviously, I think, a little ahead of us on the curve, and—Mr. Chairman, I know I've gone over my time, but—I know you are concerned about this issue, as well.

Mr. MONIZ. Mr. Chairman, if I may add one comment—or am I out of order?

Mr. BARTON. No, we'll give you—we've got the hearing room until 12, so——

Mr. MONIZ. I would just note that we are very acutely aware of the concern that you expressed. The good news is that in many areas—for example, even in nuclear power, where we have not, ourselves, had a new plant ordered for many years—we have modern designs from American companies which are leading the world. In advanced turbines, we are out there in front. For the photovoltaics—we have a huge export market right now for the photovoltaics.

We could provide a lot more detailed information on this——

Mr. BARTON. I thank the gentlelady from Missouri. We'd recognize the gentleman from Oklahoma, Mr. Largent—he asked to go out of order—and then we'll proceed in regular order after that.

Mr. Largent, for 5 minutes.

Mr. LARGENT. Thank you, Mr. Chairman.

Dr. Moniz, how many employees are there at the Department of Energy? Currently?

Mr. MONIZ. The Federal workforce is—I believe it's around 15,000. Then there are about 100,000 when you include the contractors who work in our laboratories and production facilities.

Mr. LARGENT. Is that number going up or going down?

Mr. MONIZ. That's gone down very substantially. Both the Federal and the contractor workforces, in this decade, have gone down in the order of a quarter to a third, depends if it's Federal or contractor.

Mr. LARGENT. Next question, I want to ask you about this Emergency Oil Task Force? It's been commissioned by the Secretary in December to develop a balanced oil action plan—when is that commission to report?

Mr. MONIZ. Well, in some sense, Mr. Largent, they are reporting continuously through developing the kinds of initiatives that we've outlined here. This task force was assembled to keep working with the industry and providing many of the ideas you've seen here.

Mr. LARGENT. Okay, then let me ask you this question. The first idea that you mentioned in your report talks about taking—or putting 28 million barrels of oil into the strategic petroleum reserve,

and using the oil—finding that oil from the offshore production. Why would you choose to use offshore production as opposed to domestic production from independent producers?

Mr. MONIZ. With your permission, may I ask one of the experts to address that question?

Mr. LARGENT. Sure. You bet. I guess my point, while your expert comes to the table, is that 80 percent of the production that occurs domestically is done so through the work and efforts of independent producers. So why wouldn't we want to be helping the 80 percent as opposed to the 20 percent which is your majors—and your majors are principally responsible for the offshore productions—not independents—so I'm saying, in this time of crisis, why are we not looking to help the independent producers who are doing 80 percent of the work, as opposed to the majors, who are doing 20 percent of the domestic production?

Mr. BARTON. We need the expert's name and title at the Department.

Mr. SHAGES. I'm John Shages. I'm the Director of Finance and Policy for the Strategic Petroleum Reserves Office.

Mr. BARTON. Okay.

Mr. SHAGES. The answer, Congressman, is that logistically, the oil coming in from offshore is the only oil that can be brought directly to the strategic petroleum reserves. All the pipelines of the country lead inland from the coast; they do not lead from the inland back to the coast. All the strategic petroleum reserve sites are on the coast. We will try to make this program available to all the producers in the Outer Continental Shelf—there are about 140 leases out there and a number of them are with independent companies.

Mr. LARGENT. Isn't it true that those pipelines used to flow the other way, though? In other words, when we were actually exporting oil, those pipelines flowed the other way, and now because we're importing over 50 percent, maybe over 55 percent of the oil today, those pipelines have reversed as a result, is that not true?

Mr. SHAGES. Some oil did use to flow to the coast, and it no longer does.

Mr. LARGENT. Okay. All right, thank you for that, I appreciate it. Let's see, the other thing I want to say about this is that there is an invitation that will be forthcoming from the Oklahoma delegation to try to—an invitation to the Secretary to come to Oklahoma, where we could put on a highly publicized forum on this issue. I believe it's not only an interest to oil-patch States like Oklahoma and Texas, but it really does present national security issues that I think we need to highlight and underscore at this time.

One other question I had about that is—and this is, I know this is a loaded grenade that I'm kind of throwing in here—and I have mixed emotions about it as well, but—what is the Department of Energy's thought—or the administration's thought—on an oil import fee? Because I don't see it mentioned anywhere in here, and yet I've heard it brought up in conversations.

Mr. MONIZ. Mr. Largent, well, first of all, I may just note that I think the Secretary would very much welcome the invitation to

Oklahoma. With regard to the oil import fee, I'm afraid I'm not aware of any such discussion at the moment. Mike? Do you——

Mr. TELSON. No, I'm not, either. You may want to ask the Secretary, but we don't know.

Mr. LARGENT. Okay. Let me—if I have just a little bit more time—I want a real quick question. Why do we not consider reprocessing spent nuclear fuel in this country, when everywhere else in the world, it's done? We'd reduce the amount of waste by 90 percent, it is environmentally friendly, it's the right thing to do. Why do we not do that in this country?

Mr. MONIZ. The policy, of course, goes back about 20 years to our non-proliferation concerns, in particular the reprocessing that is being pursued in other countries right now separates out plutonium, which is then—if acquired in the wrong hands—rather directly usable in a nuclear weapon, so we continue to try to maintain a strong non-proliferation regime.

Mr. LARGENT. Mr. Chairman, let me just say in closing—ten seconds—that I am—I want to commend the Department of Energy and the administration for putting out a plan on electricity restructuring. It's a very important issue for our country, and I look forward to working with you on coming to a consensus bill in the near future.

Thank you, Mr. Chairman.

Mr. MONIZ. Thank you.

Mr. BARTON. Thank you, Congressman Largent. We'd recognize Congressman Wynn for 5 minutes.

Mr. WYNN. Thank you, Mr. Chairman.

I noted in your testimony that you said that the problem would be working with Congress to advance electricity restructuring. My colleague just mentioned he was looking forward to working with you on that role. I'd like you to comment, if you would, about consumer protection issues with respect to restructuring, and specifically on the Department's position with respect to reliability issues that may be raised in the course of restructuring.

Mr. MONIZ. First, there will be a number of consumer issues addressed in the plan which is still undergoing final tuning. For example, a very important issue of serving rural customers is one very important example—as well as other issues involving PMAs.

With regard to reliability, there are discussions, of course, as to how regulation of transmission would be handled. Second, we are—of course, reliability—a near-term issue of reliability is Y2K, where we are working with NERC to try to assure——

Mr. WYNN. Could you repeat that please—I didn't——

Mr. MONIZ. A near-term reliability issue is our work with NERC—the North American Electric Reliability Council—to make sure the Y2K problem does not bite us later on this year. And finally, we are increasing our research program in reliability technologies for the good of the future.

Mr. WYNN. There is a lot of sentiment—and I don't want to actually get in the debate today—but there's a lot of sentiment that individual States are well-positioned to address most of the restructuring concerns, but that they may not be as well-positioned to discuss or to address the reliability issues. What's the Department's

position on this? Is there a Federal role in reliability—addressing reliability concerns?

Mr. MONIZ. Yes, we believe there is. We believe there are a number of considerations that go beyond the State considerations, involving, for example, regional issues. In that context, we are—we will be discussing a role for FERC in addressing reliability rules, basically. So that is under final development, but we are proposing, certainly, a role for FERC.

Mr. WYNN. When do you believe that you will be in a position to discuss these with Members of Congress?

Mr. MONIZ. I believe the administration bill is in process. We believe it's very close. I would anticipate, certainly, in March.

Mr. WYNN. By March——

Mr. BARTON. Would the gentleman yield on that point?

Mr. WYNN. Certainly, Mr. Chairman.

Mr. BARTON. Just to inform the Under Secretary—and you can inform the Secretary—we're going to be holding hearings on comprehensive restructuring probably mid-March.

Mr. MONIZ. Mid-March, thank you.

Mr. WYNN. Just a question regarding—you said there was perhaps an issue relative to rural customers—would similar issues be raised with respect to urban or low-income customers as well?

Mr. MONIZ. I'm not sure. Do you know [speaking to staff]? I will be honest, I am currently unaware of such discussion, but it's a very important point. I will——

Mr. WYNN. What we've been hearing is that there may be some price discrimination with respect to customers in urban areas or low-income customers. Obviously, restructuring represents an opportunity for tremendous consumer savings, but those savings are basically for wholesale customers or larger customers and don't actually trickle down to the residential—both low-income and middle-income customers—that would be problematic, and I would really appreciate the guidance of the administration and your Department on how we address these issues.

Mr. MONIZ. Yes. One thing I might just add—of course, it is not specifically targeted at urban customers, but—the 1998 bill proposed a public benefits fund, which includes State grants, which of course, could be used in targeting particular populations.

Mr. WYNN. Thank you very much. Thank you, Mr. Chairman.

Mr. BARTON. Thank you, Congressman Wynn. The Chair would recognize—I think Mr. Whitfield was here before Ms. Wilson—so we would recognize Mr. Whitfield, 5 minutes, questions only.

Mr. WHITFIELD. Mr. Chairman, thank you very much. During my opening statement, I mentioned the fact that Secretary Richardson, back in October, came to Kentucky, and amidst a lot of publicity, talked about how he was going to have submitted in the Department of Energy's budget for the year 2000 funds and a legislative plan to build two conversion plants—one at Portsmouth, Ohio and one at Paducah—to help deal with this depleted uranium hexafluoride problem. And yet, I notice in the 2000 budget for the Department, there's not anything in there about this plan. I was wondering if you could address that, Mr. Moniz.

Mr. MONIZ. Yes, I certainly would be happy to. I'm certainly aware of your and Mr. Strickland's strong interest in this issue. Let

me say first of all that we regret that the plan is not on the table at the moment, but let me outline what we believe is a schedule that will allow all of us to work together on this important issue.

First, you referred earlier to the Expression of Interest that we will be sending out to begin the process, and particularly looking at getting industrial input in—in terms of the conversion plants and possible demonstration plants. That EOI will be completed this week and in the Commerce Business Daily next week. In March, we will issue a preliminary DUF6 plan, and also complete and issue the final programmatic EIS.

With the input from the EOI, then we will move to a final plan. We are targeting that for May—to issue a final DUF-6 plan—and then to issue a draft RFP for the conversion contract and hold a bidders' conference and go through that entire process. We would hope to issue a final RFP in July, potentially receive conversion plant proposals in September, move to award early in 2000, and potentially—and I stress, of course, these are all subject to change after we receive the EOI input—but we would like to target, if at all possible, completed design for full-scale facilities very early in 2002.

So that is the path that we have laid out, and it will be kicked off with the EOI and the draft preliminary plan very, very shortly.

Mr. WHITFIELD. Well, that's very good news. I hope that you all will be able to maintain that timetable on that aspect of it.

On this Worker and Community Transition Program, there's been some discussion recently about the elimination of the Office of Worker and Community Transition Program—that obviously is a very important program because, as a result of the privatization, there already has been job loss in Kentucky and in Ohio, and we think it's quite important that we keep this worker and community transition program in existence. I had heard recently that the administration might propose the elimination of the Office of Worker and Community Transition. Is that accurate, or is that just a rumor?

Mr. MONIZ. I am certainly not aware of that—as you know, we've proposed a $30 million budget this——

Mr. WHITFIELD. Right. And I guess that's down from about $45 million. So you all have no intention of proposing the elimination of the program?

Mr. MONIZ. That is certainly my understanding. We feel that the program clearly accomplishes very important goals with regard to the communities that have served us and that we serve. It has, in fact, generated, we estimate, about 16,000 jobs over the complex. We expect to equal that in the years ahead.

Mr. WHITFIELD. Okay. Well, I see my time has run out, but I have more questions.

Mr. BARTON. No, the Chair is going to let every member here ask 5 minutes, and then the Chair has a number of questions. If the gentleman from Kentucky wishes to stay, we'll, once everybody has at least 5 minutes, we're going to have kind of an open-ended question session that you can participate in.

The Chair would recognize the gentleman from Ohio, Mr. Strickland, for 5 minutes.

Mr. STRICKLAND. Thank you, Mr. Chairman, and I would like unanimous consent to submit an opening statement and a list of questions that I probably will not have the chance to ask today. With your permission, I would——

Mr. BARTON. Without objection—we had already given that blanket consent, but we will certainly give you special unanimous consent.

Mr. STRICKLAND. Thank you, Mr. Chairman—and I want to follow up with my colleague, Mr. Whitfield's comments. Thank you, Mr. Under Secretary, for being here to answer our questions.

I noted that in the President's proposed budget there's $5 million allocated, and we are concerned—I think Mr. Whitfield and I both are concerned—that only $5 million has been allocated to implement Public Law 105-204, and I'm just wondering if you could give us some explanation as to why what appears to be a fairly meager sum has been included in the President's request.

Mr. MONIZ. Well, we believe of course, first of all, we want to husband the resources, that total $400 million roughly, carefully. We believe in the process that I just laid out in response to the last question on the timetable. These $5 million will be appropriated for beginning the work on the conversion plans, going through NEPA processes, getting design work going.

As I said, we are hopeful—again, contingent on the kind of input we receive from industry—but we believe we can aim for a 2002 design completion.

Mr. STRICKLAND. So the amount of money, in your judgment, does not reflect any lack of commitment or intent to follow through with the intent of the law?

Mr. MONIZ. Quite the contrary, Mr. Strickland—this is a strong commitment, and we will absolutely do our best to feed input and hold to the kind of schedule that we discussed.

Mr. STRICKLAND. I would like to ask a question, if I could, about the Russian HEU deal—both, once again, Mr. Whitfield and I have had very similar concerns in regard to these issues.

I understand that the Omnibus Budget Act of 1998 included $325 million to purchase natural uranium stockpiles from Russia in an attempt to encourage Russia to resume shipments of enriched uranium and to rescue this HEU deal that is of concern to us. Could you explain to me precisely what the administration is going to buy with the $325 million? Will this material be stockpiled? If so, could you tell us where, and where the resources to pay for the storage will come from? I don't know if you have those bits of information right now, but that's an issue that is of great concern to me.

Mr. MONIZ. I can certainly respond to that.

First of all, as you correctly point out, the HEU agreement with Russia, which of course is a centerpiece of our non-proliferation objectives, is currently not functioning optimally. The key is, in fact, to resolve to so-called natural uranium component—and there currently are or soon will be, approximately 11,000 tons of natural uranium sitting at USEC.

The $325 million to which you referred was appropriated to purchase the 1997 and 1998 uranium—namely, these 11,000 tons at the then market price—however, contingent upon there being a contract between Russia and western companies to market all fu-

ture natural uranium consistent, of course, with the ceiling set in the original legislation.

So, if this all goes forward, then presumably, we would purchase the 11,000 tons. As indicated in the protocol that the Secretary signed with Mr. Adamov in Vienna, we would—in the interests of stabilizing everything—store that uranium for approximately 10 years; details to be worked out, but presumably, somewhere with USEC.

Mr. WHITFIELD. Mr. Chairman, could I ask one quick follow-up?

Mr. BARTON. Yes, you may. You would ask it anyway, so we'll just give you permission. No—you're very welcome to.

Mr. WHITFIELD. I'm wondering, in your judgment, is it likely that there will be a requirement for additional expenditures in the future to keep the Russian HEU deal alive?

Mr. MONIZ. No.

Mr. WHITFIELD. Thank you. Thank you, Mr. Chairman.

Mr. BARTON. The Chair would recognize the gentlelady from New Mexico, Congresswoman Wilson, for 5 minutes.

Mrs. WILSON. Thank you, Mr. Chairman. I have a number of questions which I'll submit in writing, but there are several things that I thought you might answer here today.

Starting out with the issue of non-proliferation and following on my colleagues' questions, what percentage of the Russian residual stockpile will remain after the expenditure of the $525 million appropriated last year?

Mr. MONIZ. First, let me indicate that the $525 million are in two pieces—the $325 million just referred to in terms of uranium, and $200 million to start our program of plutonium disposition.

I cannot give you precise numbers in terms of the remaining stockpile, but let's just say that in the uranium case, perhaps comparable amounts might be remaining, and in the plutonium case, somewhat larger amount than the first traunch of 50 tons.

Mrs. WILSON. Do we have any plan for further purchases to complete the purchase of that stockpile? And if not, what is the—what are our intentions with respect to controlling proliferation of that material?

Mr. MONIZ. It's a very good and very difficult question. Our work with Russia—and, in fact, our own internal work—involves, clearly, a steady stream of disposing of the material—and I might add that—for example, the HEU—the 500 tons over 20 years is about all the system can bear.

With regard to the remaining material, we are working, of course, with very strong materials protection control programs, so we are trying to make sure that the material is secure. With regard to the plutonium, in addition, we will be moving materials into a new storage facility that the Department of Defense is working to construct with Russia at Mayak.

So basically, it is physical control, accounting, and a steady program of disposition.

Mrs. WILSON. In your budget, you have $30 million for a nuclear cities initiative, and $30 million for initiatives for proliferation prevention. Can you please describe to me exactly what we're purchasing in those cases, or what the programs are?

Mr. MONIZ. Yes. Both programs—they're somewhat different—but both programs involve a variation on the theme of engaging Russian scientists and engineers in Russia, as opposed to having them engaged elsewhere. They involve, in the IPP—Initiative for Proliferation Prevention—case, they involve research programs—some of which may lead to commercialization in which American national laboratory individuals oversee the programs, guarantee accountability in terms of the work done, and in terms of it not being employed for weapons work—in contrast to a recent New York Times article.

In the nuclear cities initiative, the first initiative is focused on a wide variety of Russians institutes, including those in major cities. The nuclear cities initiative addresses the 10 so-called closed cities, or secret cities, which are typically in not very convenient places in terms of infrastructure and transportation. We are working there in the cities to develop unclassified work. Frankly, it's an issue of working with them to help right-size their complex, which, for our own security reasons, we want to see come down in scale over the next years.

Mrs. WILSON. Has the Department of Energy or the administration considered any alternatives other than direct subsidy of those cities in keeping those people in place? In particular, have you worked or considered changing immigration laws to get those scientists, or key scientists and engineers out of Russia?

Mr. MONIZ. Over the last years, since the end of the cold war, of course, there have been a number of Russian scientists and engineers who have come to this country and worked with us. There is, however, not an organized plan to bring the scientists from the nuclear cities to the United States—there are other issues in terms of impacting our own workforce which could be addressed. What we are doing—we do not view this as simply aid—we are working with them to develop specific projects which can also help them develop something of an economy. This is a challenge, but as an example, I will note—and I regret I can't say what the details are at the moment, but probably within a few weeks, for example, you will see, under the nuclear cities umbrella, an expansion of software work going on at one of the closed cities, involving American industry. So that's the kind of program that we like to see develop.

Mrs. WILSON. Thank you, Mr. Chairman.

Mr. BARTON. Thank you, Congresswoman Wilson. The Chair would recognize the gentleman from Pennsylvania, Mr. Klink, for 5 minutes.

Mr. KLINK. Mr. Chairman, I thank you. I apologize for my late arrival, but your old subcommittee is also meeting, and as you know, I'm the ranking member up there—we're holding a simultaneous hearing, and Dr. Moniz, let me welcome you, thank you for being here. It's good to see you again—I saw you briefly in the hall, but we were running to our committee.

I really appreciate the Department's mission to foster a secure and reliable energy system that is environmentally and economically sustainable. But I am disturbed that there is a year-by-year cut in the fossil fuels program. I'd like an explanation about that—specifically, Dr. Moniz, I want to ask about fossil fuel research and development. The fiscal year 2000 budget request for this is $364

million—that's down $20 million, or about 5.4 percent from fiscal year 1999. I notice in your testimony that you make up for the decrease; that you're continuing to develop Vision 21 Powerplex program, which you call the roadmap to the future, and the power plant of the future—where modular technologies will be integrated into non-polluting energy-producing facilities such as membranes for the low-cost separation of oxygen and other gases.

You say you expect Vision 21 power plants to be highly efficient. In your testimony, you also say that by the year 2030, these plants could reduce greenhouse gas emissions globally by 370 million tons of carbon a year—that's pretty good.

Now, you may know that, currently, I don't support the Kyoto protocol because it doesn't require the same emission standard reductions between developed and developing countries. We have to get the developing countries to participate meaningfully. But I'm very proud of the work that we've done in Pittsburgh by the Federal; Energy Technology Center—the FETC Center—where they manage the entire coal and natural gas program for the Department's Office of Fossil Energy. I know you're very familiar with what they to there. FETC is working with private industry, with universities, and with national laboratories, to develop advanced energy and environmental technologies. I believe that they deserve an increase in funding for fossil fuel research and development—or at least the same level as last year, instead of a steady decrease. You seem to be correlating Vision 21 with global warming—I'm not sure that that's true, but that's part of my question.

Today, a fossil fuel, coal, is the primary source of fuel for electric generation. Realistically, you know that we cannot meet the Kyoto emissions reduction requirements by 2008. It would have a tremendous effect on the transportation industry, the manufacturing industry, building, power-generation sectors of our economy. Don't you think it would be most beneficial to increase, or at least maintain, the funding level for fossil fuel research and development rather than cutting it?

Coal is the backbone of our economy currently. We have to have a bridge to get from where we are to where we want to be by 2030 or 2050. The good people at FETC, I think, should be given more funds so they can expand their partnership with industry, with universities and laboratories, to further develop an advanced energy and environmental technology. I believe this funding cut is to the detriment of FETC's partnerships, and I believe the Department is making a mistake in cutting fossil fuel funding. I would like to hear the rationale you have for cutting fossil fuel research in your budget, and I will thank you and let you respond.

Mr. MONIZ. Thank you for the questions. Let me make several comments, if I may. First of all, I will note that I am pleased that I will be visiting FETC on March 15 and 16, and I'm looking forward to that very much.

Let me first respond to the question about the association of the Vision 21 with greenhouse gas emission reduction. It is indeed, I think, a very important contribution to greenhouse gas emission reduction by improving efficiency enormously, but I do want to stress that, again, the objectives are multiple—increasing efficiency in our fossil energy use addresses our economic strength, our energy secu-

rity, our environmental issues—be they urban smog particulates or acid rain, or global warming issues. So, it's certainly a multi-pronged approach. With regard to the budget—I would just note two things. First of all, I want to go back and maybe stress—of course, we recognize that 85 percent of our energy use in this country is fossil. And when we talk about efficiency programs, be they in the fossil energy program or in the conservation appropriation, they are both basically fossil programs. So in some sense, once you add a major part of the efficiency program with the fossil program, to understand our total investment in fossil energy R&D.

Second, the small decrease in the funding, I should also note, that part of that is the end of some major programs. For example, in the fossil energy case, the low emission boiler program is coming to an end—so that is ramped off.

In the natural gas arena, for example, there's a major program in the efficiency program that involves small turbines—gas fire turbines—that program is going into commercialization, and we're coming out of it.

So we believe the program, while not, frankly, as robust as we would like, does, in fact, maintain the core activities quite well.

Mr. BARTON. The gentleman's time has expired. Do you have one more question, Congressman Klink?

Mr. KLINK. No, I will have some follow-up in writing, and if the Under Secretary would be so kind as to respond, I would——

Mr. BARTON. The Chair would recognize the gentleman from Mississippi, Mr. Pickering, for 5 minutes.

Mr. PICKERING. Thank you, Mr. Chairman. Dr. Moniz, the first question is concerning the nuclear waste issue. My understanding is the DOE program staff estimate the nuclear waste program will need approximately $11.6 billion in funding between fiscal year 2000 and fiscal year 2010, in order to maintain the schedule and open the repository in the year 2010.

Now, to stay on this schedule, program staff estimates the DOE needs $739 million in fiscal year 2000. Yet, you only ask for $370 million. So my question is, how can you say you're on track for the repository in 2010 when you only ask for half the funds needed to get the job done?

Mr. MONIZ. The request of just over $400 million, we believe, is the request to keep us on track for the repository in 2010. The request, in particular in the year 2000—in fact, we increased it above $370 million because of the results of the viability assessment that identified some issues that needed increased funding in order to keep us on track for the suitability determination in 2001. So, according to our profile, to reach the $10-plus billion requirements through 2010, we believe we are on track with that budget request.

Mr. PICKERING. Let me make sure that I understand. Does DOE staff project that you need 739, or is that incorrect, for this year? Or—excuse me, for 2000, fiscal year 2000.

Mr. MONIZ. No—perhaps the CFO would like to address that question——

Mr. TELSON. The staff request is $409 million for this year—$370 plus $39 million of supplementary funds, they were requesting. 739, I believe, includes other work that does not pertain to our program, per se.

Mr. BARTON. Would the gentleman from Mississippi yield?

Mr. PICKERING. Gladly, Mr. Chairman.

Mr. BARTON. This is a point that I'm going to get into in my questions—but to facilitate the gentleman's questions from Mississippi—if you take $400 million times 11—that's $4.4 billion—that's not $10 to $11 billion. So you must have a funding profile that in the future goes up much more rapidly than the $370 to $400 million. Is that correct?

Mr. MONIZ. Yes. In the years, for example, 2006, 2007—our profile is up at $1.3 billion—per year.

Mr. BARTON. I yield back——

Mr. PICKERING. Thank you, Mr. Chairman. My other questions concern the strategic petroleum reserve. I want to commend the Department for looking at flexible ways to address some of those issues, but I also want to kind of combine these questions to the efforts that Mr. Largent—the issue Mr. Largent raised—is there a way that we can also help our domestic producers, our independent producers—and you mentioned in your budget, also, ways that you will try to help them through tax relief and through research and development.

My first question on strategic petroleum reserve—the current capacity is approximately 700 million—is that correct? 700 million——

Mr. MONIZ. 680 million.

Mr. PICKERING. And that is after the decommission of the site. And you currently have how much oil in the strategic petroleum reserve?

Mr. MONIZ. 561. 561.

Mr. PICKERING. And you say that you will put 28 million barrels of offshore production in your budget, and so that leaves approximately 100 million barrels of capacity. Do you believe that the commercial storage potential will fill the rest?

Mr. MONIZ. I think it's—we'll have to wait to see what the industrial response is. But again, if I may ask our expert on this what he thinks—if you'll permit. John, do you want to——

Mr. SHAGES. We're of course hopeful, but the amount of capacity that we're offering is the capacity of the Big Hill site, which is 70 million barrels of capacity, and so the commercialization effort wouldn't fill more than that.

Mr. PICKERING. Now, would you charge a fee or lease arrangement for them to store in your facility?

Mr. SHAGES. Yes, that's the whole idea of the program—that we would charge a fee to be paid in-kind so that we would be adding oil to the strategic petroleum reserve inventory.

Mr. PICKERING. Would it produce a revenue flow to the Department of Energy that could be used for help in other domestic production?

Mr. SHAGES. We would not accept money in payment—we would be accepting——

Mr. PICKERING. It would be in-kind——

Mr. SHAGES. In-kind.

Mr. PICKERING. Okay. So, in essence, you would provide—not free storage—but, in essence, you would give the incentive to have the storage for our nation's stability and security of supply, and in

return we would have an additional capacity in storage in this strategic petroleum reserve.

Mr. MONIZ. Yes, and it would increase in capacity.

Mr. PICKERING. As you know, back in the 1992 Energy Act, there was a—several issues raised, and subsequently—on the possible lease of oil versus the purchase of oil. Now, if I remember correctly, a lease arrangement cost about a quarter—25 percent—of a purchase of oil over a 15 year period of time. Is that correct?

Mr. TELSON. Are you referring, sir, to the leasing of oil from producers, or——

Mr. PICKERING. From producers. Now, in the past, it was always done under the assumption it would be from a foreign producer, but I think in today's environment, we may want to look at domestic producers or domestic supply. A foreign lease has, as you know, many complications. The question is, can you do more—either through a lease of the commercial storage—if, for example, we drew down more of the strategic petroleum reserve, currently, around 500 million barrels? If you sold it at $10 a barrel, that's approximately $5 billion. Could you use the $5 billion to then have targeted tax relief, assistance to the domestic industry to maintain our infrastructure, and feel it would be the commercial storage lease at a lower cost to the government? Do you understand my question?

Mr. TELSON. Yes, sir, I think you are suggesting, if we sold some oil, what would happen to the proceeds from that?

Mr. PICKERING. That is correct, and could you produce revenue——

Mr. BARTON. This will have to be the last question of this question period.

Mr. PICKERING. Sure. But the question is, you are saying that you need offsets to be able to help the domestic industry through tax relief or through other efforts. If you were to sell the oil but at the same time replace the commercial storage or lease, so that we don't jeopardize our security of supply, but it is a more cost-effective way, and it could provide the offsets to assist our domestic industry—as the Department considered or contemplated that type of approach?

Mr. TELSON. Mr. Pickering, we will be glad to sit with you and discuss these ideas. They are pretty complicated ideas, as you know, just laying them out. But maybe there is something there that we should look into.

Mr. PICKERING. Is it possible, if you sold it, you could use the receipts for these other purposes?

Mr. TELSON. Not without a congressional authorization. But we will be glad to talk about it.

Mr. PICKERING. Thank you.

Mr. MONIZ. I would just add that, of course, selling oil right now is one of the things we are trying to not to because of the market.

Mr. PICKERING. Right. I realize that, but in business, you know, bad money after bad money is not a good principle. If you can do it at 25 percent of the cost, and at the same time use the money for productive purposes that will give a good investment, then you have to look at those options.

Mr. MONIZ. Yes. It is a tradeoff. Again, we would be happy to certainly work with you.

Mr. PICKERING. Thank you.

Mr. BARTON. The gentleman from Mississippi used to work for the Majority Leader, Mr. Lott, and he stretched that one last question to about 5 minutes' worth of questions.

We are going to recognize the gentlelady from Missouri. She claims she has one followup question before the chairman starts.

Ms. MCCARTHY. Thank you very much.

Dr. Moniz, I want, first of all, to thank the Secretary for visiting the Allied Signal plant in my district and for his very wise decision with regard to their future. We are all very pleased.

I wanted to talk about the overall Federal management technologies Allied Signal budget because in fiscal years 1998 and 1999 we, the Congress, increased the funding earmarked for them. In 1998, we increased the appropriation from the requested amount by about $20 million, and in fiscal year 1999 the Congress add-on amounted to $12 million.

Can you tell me how much of this was actually sent to Allied Signal, and if all was not given to the plant, where the remainder was sent? And Mr. Telson?

Mr. TELSON. I am sorry, Ms. McCarthy, could you repeat the question? I heard the elements, but I didn't put it together.

Ms. MCCARTHY. Yes. The Congress put more money into the Federal manufacturing and technologies Allied Signal plants in the past 2 fiscal years. I don't need to go over the numbers.

Mr. TELSON. Yes, of course.

Ms. MCCARTHY. But that add-on, I wonder how much of it actually reached those facilities across America, including my own——

Mr. TELSON. Congresswoman, we will be glad to get you the specific answer, the number. We have run into the phenomenon over the past several years that there are additions to lines, and then below the line there are general reductions required by the committees. What often happens is that the general reductions, when they are distributed across, in many cases end up eating up a lot of those increases. So we will get you a description of that.

Ms. MCCARTHY. That would be very helpful, because that would, then, address the rumor that about $20 million was sent to the laboratories, and we could put that rumor to rest.

Mr. TELSON. We would be glad to get that information for you.

Ms. MCCARTHY. I thank you very much, Mr. Chairman, for your gracious offer.

Mr. BARTON. The Chair is going to recognize himself for an open-ended question period, since everybody has had an opportunity to answer first round. If the members here—well, Mr. Fossella has not had a chance. Does Mr. Fossella wish to be recognized for 5 minutes?

Mr. FOSSELLA. No, thank you.

Mr. BARTON. Okay. Now all members that are present, if they wish to participate either in the line of questioning that the Chair is going or another one, feel free to interrupt, because we know that they have schedules.

Mr. Secretary, I want to refer you to a draft funding profile that we just handed out. It was given to us last week at the staff level

on the minority and majority side in preparation for this hearing. The title—it is a draft, and it is "Cashflow Funding Profile for H.R. 45," which is the high-level nuclear waste interim storage bill that is pending before this subcommittee. Do you have a copy of that? Have you ever seen that before? I don't have knowledge that you have seen it, but I don't want to——

Mr. MONIZ. I saw it last night.

Mr. BARTON. You did? Okay, so you have at least had some familiarity with it.

I want to go back to some of the questions that Mr. Pickering was asking, because it is the majority staff view—and I believe the minority staff would concur with this—that an analysis of this admittedly entitled "draft" profile indicates that the annual appropriations required for Yucca Mountain are going to be significantly higher than the historical appropriation levels. If you assume a historical funding profile of $350 million, we don't believe that the permanent repository is going to open in 2010.

Now if you look on this chart, at the top, you have got a category called Yucca Mountain, and it has a funding profile this year of $308 million, and it goes to the current budget year that you were testifying before today, $359 million. If you go on out, it does get up in 2005 and 2006 to $925 million, and then $1.02 billion in 2006; 2007, it is over a billion dollars. So that the aggregate total from fiscal year 1999 to 2010 is $6.5 billion.

The interim storage proposal, the next line below that, its aggregate number is $4.553 billion. The program management number is a little over half a billion. The total program number is $11.613 billion—$11.6 billion, and that is an average of over a billion dollars.

Now the appropriation request that we have before us doesn't appear to match that. Could you elaborate on that or explain to me how I have misread this document?

Mr. MONIZ. Yes, sir. First of all, I don't think you have misread it, from what I can understand. But, of course, this is a draft cashflow chart for building the repository and doing interim storage——

Mr. BARTON. Right.

Mr. MONIZ. [continuing] whereas our appropriation is that matched to doing the repository. So in that profile, then the $409 million in 2000 is what our profile says. So, without interim storage, the profile is roughly $400 million, up or down a bit, through 2002, and 2002 is when the licensing within our construction starts, and then the profile jumps dramatically after 2002.

The chart that we have here includes interim storage, and then, of course, it ramps up much more——

Mr. BARTON. I understand that.

Mr. MONIZ. Yes.

Mr. BARTON. But it doesn't appear to me that, based on your testimony today, that you are on track, based on this, to have the funding levels that you need to get the repository open.

Mr. MONIZ. Mr. Chairman, I would say we are on track. Without interim storage, we are on track, but it does raise the issue that, as you noted correctly, that 5 years down the road we would need

to be at an appropriate level, substantially higher than the historical funding.

Mr. BARTON. Okay, well, let me ask this question: Based on this—again, this is a draft analysis; you didn't submit this in your testimony, so I understand that it is not official departmental policy. But in this analysis, you get out to 2006, 2007, et al., and you are well over $1 billion a year.

Mr. MONIZ. Yes.

Mr. BARTON. Now where is that money going to come from?

Mr. MONIZ. May I just add that is the case with or without interim storage. It is higher with interim storage, but it is $1.3 billion I think in the case without interim storage.

What I would say is the integrated cost to year 2000—to 2010, excuse me—which in the Yucca Mountain repository only program is $10.1 billion, can be accommodated in the waste fund. The issue is getting access to it, getting the annual appropriation to be in this $1-plus billion annual range. But the waste fund is growing currently in terms of receipts plus interest at roughly a billion a year.

Mr. BARTON. Well, then, my understanding is these funding requests do not take money from the waste fund. Is that correct or incorrect?

Mr. MONIZ. I think that would be a policy issue to address at that time. Mike, do you want to?

Mr. TELSON. It does. It would have to, presumably. But that is the issue we have to address in the years forward.

So, again, we would argue the waste fund has the resources, but it will require an administration/congressional understanding that one has access to a billion——

Mr. BARTON. My staff analysis is that there has been about $15 billion put into the waste fund. We have got about $8 billion currently in the fund. Is that the Department's assessment of the fund also?

Mr. MONIZ. It is $7 point something, is our current assessment. What is the number? Our analysis is $7.3.

Mr. BARTON. $7.3 billion?

Mr. MONIZ. Yes, and growing at about $1 billion a year.

Mr. BARTON. Okay. Now let's go back to Mr. Telson. Is it the Department's position to take some of the funding for the repository from the waste fund, which you don't show that you are going to do that? But at some point in time do you think you will? "You" being the Department, not you personally.

Mr. TELSON. No, no. We do in 2000. Our request does take money from the waste fund in 2000, part of it, and in the outyears it is 370, I think—I am sorry, 307, is that correct? A hundred and fifty in 2000 from the waste fund itself, but in the future we will have to tap into it higher than we are now, and that is just the consequence of the fact that we have been undertapping it over the last 15 years, and now we will have to go the other way, when we start the construction. That was the purpose, presumably, for developing the balances.

Mr. BARTON. We are going, in the very near future, to mark up H.R. 45 in this subcommittee. Is the Department going to offer an alternative to H.R. 45? Is the Department going to offer amend-

ments to H.R. 45? Or is the Department going to just oppose H.R. 45? Or do you know?

Mr. MONIZ. Well, the administration, as you know, continues to oppose H.R. 45, and certainly the bill in its current form the President presumably would veto. The Secretary, as he said in his confirmation, is looking forward to discussions with Congress on this subject.

Mr. BARTON. Okay. Would you inform the Secretary that the Chair and the ranking minority and the full committee chairman and the ranking member of the full committee are going to invite the Secretary for a discussion on that in the very near future?

Mr. MONIZ. Yes.

Mr. BARTON. Because we are planning to move the bill, at least in the subcommittee, and I can't give you a time table, but very quickly. If there is a way—if there is a specific concern that can be alleviated by a particular amendment or a change in phraseology, or whatever, we would certainly wish to discuss that with either the Secretary himself or whoever he designates to be his spokesperson.

Mr. MONIZ. If I may add, Mr. Chairman, the Secretary certainly has stated that he hopes to avoid or help avoid a legislative showdown on this.

Mr. BARTON. We understand. We share his willingness to avoid a showdown, if that is the term he wants us to use.

Mr. MONIZ. On the other hand, I think the administration does remain strongly committed to the idea that any kind of early—certainly any kind of a commitment to the kind of interim storage proposal being proposed would undercut our development of the repository.

Mr. BARTON. I have a pending vote on the floor. At some point in time, I am going to actually have to suspend. What is your time schedule? Are you willing to wait? I think Mr. Whitfield is going to come back; Ms. McCarthy probably is going to come back. Are you willing to—I think even if we take time for a little vote, we can wrap this up by 12:30.

Mr. MONIZ. Oh, that would be fine, Mr. Chairman.

Mr. BARTON. Okay. Then we are going to recess the hearing until five until 12. I should be back here at five until 12, and we will continue the questions.

Mr. MONIZ. Very good.

[Brief recess.]

Mr. BARTON. We certainly appreciate Under Secretary Moniz being very agreeable to staying. Hopefully, we can wrap this up in the next 30 minutes or so, if we don't have any other votes.

Before the recess, Mr. Under Secretary, we were looking at this draft flowchart, a funding profile which would be required under H.R. 45. Now I want to read from the written testimony that Mr. Lake Barrett presented to our subcommittee on H.R. 45 2 weeks ago.

I quote, "H.R. 45 would undermine our ability to open the repository as scheduled in 2010 by shifting budget priorities and work effort to an interim storage facility."

He went on to state that, again, "Based on historical appropriations patterns, the proposed bill's funding provisions do not provide

sufficient funding resources to support the simultaneous construction and operation and an interim storage facility and the repository program."

Now we will accept the fact that H.R. 45 requires higher funding levels than have been historically appropriated. That is a valid criticism. But if you look at this funding profile, it appears to me that the Department's funding profile, whether you have an interim program or not, does the same thing. It just does it later. Do you all agree with that?

Mr. MONIZ. I think that is likely to be true.

Mr. BARTON. Likely to be true? Is that as close as I am going to get you to giving me a straight answer?

Mr. MONIZ. No, I will——

Mr. BARTON. It is true. I mean, the plain fact, Doctor, is that it is true. Again, I am not here to get into an argument with you over the high-level waste bill.

Mr. MONIZ. Right.

Mr. BARTON. I mean, the Clinton administration, Secretary Richardson can support it, oppose it. I understand that President Clinton has given Senator Bryan a letter that he still intends to veto it. That is fine.

We are going to try to do a bipartisan bill that can sustain, that can overturn a veto. We are not idiots up here. I mean, you know, we understand the President does what he has the right under the Constitution. To trump him, we have got to have more than a two-thirds vote. I am working to get that in the House, and I know certain Senators are in the Senate.

But it would be nice to at least agree on what the funding profile is, whether you support an interim storage facility or not. Now I think we are going to get you the votes, so that next year, if you are still the Under Secretary and you come before this subcommittee, and I am still the chairman, we are going to talk about funding interim storage, because it is going to be a law of the land. But I may be wrong; we may not. But let's at least talk from the same page in terms of funding requirements.

Even though it is a draft, and it is not official policy, it does appear reasonable that this is the funding amounts that are going to be required. Do you agree with that?

Mr. MONIZ. May I, Mr. Chairman, explain what I meant by the "likely" statement?

Mr. BARTON. Yes, you may. You don't have to ask permission to explain yourself. This is an open hearing.

Mr. MONIZ. I was trying to be precise within my limited understanding of budgetary issues. What I meant was the following, and perhaps Mr. Telson can clarify:

Each year there is coming in now an annual funding stream of $650-or-so million.

Mr. BARTON. Right.

Mr. MONIZ. In the future, I believe there will be an additional funding stream coming from the defense side to catch up.

Mr. BARTON. We are less sanguine about that actually happening, but we understand that is your proposal. We are a little skeptical of that, but we——

Mr. MONIZ. And this is all part of where the "likely" was coming.

Mr. BARTON. Right.

Mr. MONIZ. If that is the case, and that is raised up to the billion dollar scale, my understanding is—and, again, I would ask Mr. Telson to clarify—is that there are a variety of thresholds in terms of the difficulty of funding these peak years.

Mr. BARTON. We would share that assessment.

Mr. MONIZ. Appropriations is an issue. There is an issue of going up to the annual income stream. With the defense issue, it was a major issue.

Mr. BARTON. Right.

Mr. MONIZ. And then there was an issue of, beyond that cap, having to access the existing fund. So all I was suggesting was that where the annual income stream is relative to the peak funding year is a qualitative year. That is all I meant by "likely."

Mr. BARTON. The subcommittee's assessment is that you are going to need more dollars sooner than you are requesting. And I think that Congressman Hall is not here; he is somewhat under the weather. He is voting on the floor, but he has trouble speaking. I think I am speaking for the majority and the minority, and so don't be surprised if, based on this hearing, we send a letter to the appropriators asking for more money for this program than the Department is. I don't think that is a bombshell to this group, but just be aware of that.

Mr. Telson?

Mr. TELSON. If I may just modify it, Mr. Barton, we will need increases in future years higher than what we have now. But in fiscal year 2000, we are confident that the $409 million will do the job that we need to do to get the position——

Mr. BARTON. Okay, now you used a phrase that I should know, but I don't. What is $409 million?

Mr. TELSON. $409 million is the amount of money we are asking.

Mr. BARTON. Oh, the amount of money.

Mr. TELSON. Yes.

Mr. BARTON. Okay. Well, Mr. Whitfield, I have another line of questioning on something else, but you have been very patient. Do you want to ask some of your questions?

Mr. WHITFIELD. Thank you, Mr. Chairman. I just have a couple.

Mr. BARTON. Sure.

Mr. WHITFIELD. I appreciate that.

Mr. BARTON. Mr. Shimkus, we are in kind of an open question period here.

Mr. WHITFIELD. Dr. Moniz, I wanted to say, again, that I do appreciate your laying out this timetable on these conversion plans. Actually, it is the first time we have heard about any timetables.

But now I want to ask you—you indicated that you hoped to have design completed by the year 2002, I believe. I was curious, why is it necessary for the Department to do the design, and why wouldn't you just contract that out with some outside firm to do design, in hopes of speeding up the process?

Mr. MONIZ. The real question is when one can be prepared to startup construction on the full-scale facilities. That is what we hope to be able to target for this early 2002.

Mr. WHITFIELD. Okay.

Mr. MONIZ. The design is complete and moving toward construction.

Mr. WHITFIELD. Now that I have advocated your letting this out to private contractors, I want to criticize you for letting out something to private contractors. You know, one of the linchpins of the privatization was that we do everything to mitigate job loss in a well-trained workforce that the USEC plans. I notice DOE has entered into an agreement with Bechtel-Jacobs to be the agent for the Department in future construction projects at these plants. Of course, they are going to be subcontracting that out, but why would you not be able to utilize more of these USEC employees, many of them who do have the skills necessary to do this kind of work? Why would you not make more of an effort to do that?

Mr. MONIZ. My understanding is that the discussion as to how that work will be handled remains to be fully resolved. Certainly, the Department very clearly supports efforts to minimize impact on the incumbent workforce, and we will working with the contractors in this direction.

Mike, do you want to add anything to that?

Mr. TELSON. Just that this contract was awarded on April 1, 1998, and, basically, it was part of our effort to be more efficient in how we handle our environmental management work at all of our plants throughout the whole system. So it is one of the features of another program that we are trying to do.

Mr. WHITFIELD. Well, I could proceed on this, Mr. Chairman, but I look forward to working with you all, because it is a real priority, not only for the Ohio delegation, but the Kentucky delegation, to get these conversion plants completed as soon as we can, because we have a real need for them.

Thank you for your time today.

Mr. BARTON. Dr. Moniz, I want to switch gears on you a little bit. I am going to hold a hearing, I hope, within the next 2 to 3 weeks on the status of the domestic oil and gas industry with specific focus on the small, independent oil and gas operators. One of the themes of that is going to be to get the State Department and the Department of Energy to explain the policy with respect to Iraq. But just to get the ball rolling, can you explain to me what the current policy is with respect to oil sales allowed under the U.N. Protocols by Iraq?

Mr. MONIZ. My understanding, Mr. Chairman, is that there is a sales sort of price ceiling, that is, an income ceiling of roughly $5 billion a year.

Mr. BARTON. That is my understanding, too.

Mr. MONIZ. $5.2 billion a year.

Mr. BARTON. Let's assume the number is $5 billion, because that is good enough for this first round in this hearing. When that number was derived, do you know what the per-barrel price of oil was, the world markets?

Mr. MONIZ. I would have to guess, but, given the timing, I would guess it was somewhere in the $17, $18.

Mr. BARTON. Yes, it was over $17; it was between $17 and $20 a barrel.

Now that being the case, what is the world price of oil per barrel today?

Mr. MONIZ. Well, as we know, let's call it in round numbers $10.

Mr. BARTON. Approximately, for even rounder numbers, let's say it is about half.

Mr. MONIZ. Right.

Mr. BARTON. Make it easy. If that is the case, doesn't it make sense to lower the cap? Because if you don't, it doesn't take a lot of mathematical genius to realize the Iraqis are going to produce twice as much oil, and if they do, that is going to further exacerbate the oversupply problem.

I am told—again, I am not the Under Secretary of Energy, and I don't have all the resources that you and the Secretary have—but I am told that one of the principal reasons that we are continuing to have these low, low oil prices is because the Iraqis are pushing the upper limits, and maybe even exceeding the limits, of what they can produce. They have the capacity to produce even more oil than they are, and so it is killing, I mean literally, the independent oil and gas community in the United States, the small guys that do these 15-or 10-barrel-per-day wells.

So why shouldn't we, cooperatively, on a bipartisan basis, take another look at this Iraqi cap, which was based on a price much higher than the world oil markets are today?

Mr. MONIZ. I am afraid, Mr. Chairman, I don't know the exact numbers in terms of the Iraqi—the volume of sales and how that impacts the market. Obviously, additional sales don't help the market.

And I am afraid that the issue of the cap, I will certainly carry your message back, but in the end that is the State Department and other people——

Mr. BARTON. Well, we are going to talk to our friends at the State Department, too.

Mr. MONIZ. Yes.

Mr. BARTON. And we are going to do a hearing focused almost entirely on this.

Mr. MONIZ. Yes.

Mr. BARTON. You weren't briefed that you were going to have to talk about this, so I don't expect you to know all the details. I am just asking kind of general theory right now.

Mr. MONIZ. Right. I would add, I believe currently the Iraqi—with current oil prices, let's say $10 a barrel, I believe the Iraqi capacity to produce tops out at, in financial terms, $3 billion or so, I think is all they are capable of producing.

Mr. BARTON. We are told that, again, on the old price they could produce between 1 and 2 million barrels a day, and they are currently producing around 3 million barrels a day and they could go up to 4 to 4.5 million barrels a day. Now I haven't confirmed that.

Mr. MONIZ. We would have to look into that and get back to you. Again, my understanding is that I think they really cannot produce today more than around 2.5 billion barrels a day.

[The following was received for the record:]

At the time of the hearing, the Energy Information Administration (EIA), an independent agency within the Department that collects and analyzes energy data, was estimating current Iraqi crude oil production at about 2.5 million barrels per day. With inflation-adjusted prices near all-time lows at that point, the EIA was estimating that under the current phase of the United Nations' Oil-for-Food program, Iraq would generate about $3 billion in the 180-day phase that ends at the end of May.

This is far less than the maximum of $5.256 billion allowed under the program. Because Iraq was so far under the maximum allowed, the EIA was assuming that Iraq was producing at full capacity. The EIA was also not expecting Iraqi oil revenues to reach the revenue cap through at least 2000.

Since the hearing, however, oil prices have increased significantly. Largely as a result of an agreement among countries belonging to the Organization of Petroleum Exporting Countries to cut oil production, oil prices have risen about $5 per barrel since the hearing. The EIA's forecast also estimates that Iraqi oil production will increase from current levels of about 2.5 million barrels per day to 2.7-2.8 million barrels per day by sometime in 2000. Consequently, the FIA's most recent short-term forecast now estimates that Iraqi oil revenues may exceed the current maximum allotted revenues ($5.256 billion) in the 180-day phase that begins in November 1999 and ends in May 2000.

Mr. BARTON. Of course, if you are a stripper well producer in east Texas, in Congressman Hall's district, and you have got a well that is producing 8 barrels a day, the price, because of delivery charges, that they are offering is $6 to $7 a barrel. It doesn't help you a lot that the Iraqis may only have another half-a-million-barrels-a-day capacity. You are going out of business. And once you plug all those wells—and, as you well know, your own testimony, at least this little booklet shows we get about 20 percent of our oil from these small producers. Once they are gone, they are gone. Once you plug one of those wells, you don't reopen it next year, when the price goes back to $15, $16 a barrel.

Mr. Shimkus, I think you might have had a question or two on this line?

Mr. SHIMKUS. I do. Thank you, Mr. Chairman.

I got a chance to visit DOE in my last term, and so I see some familiar faces, and I appreciate that relationship that that visit developed.

Energy security is a big issue in your office. So I, too, have concern over the low prices in oil. It is a big local constituent concern, because still in southern Illinois we have marginal wells, maybe 2 gallons a day, that—2 barrels, excuse me. Marginal, marginal wells.

They are being plugged up, too. From the debate of energy security, which those of you who followed just by first two terms, and being a former Army officer, is a big concern of mine. So I, too, encourage the chairman to, and look forward to the hearing on these low oil prices because it will have an impact, as we continue to close up the marginal wells in our country. I think that needs to be discussed.

Is there dumping; i.e., the dumping—lower prices—of oil or refined gas on our markets? Do you know of any instances of that?

Mr. MONIZ. I personally do not know, Mr. Chairman, but if I may ask one of the experts here, they can respond. We have no knowledge of that.

Mr. BARTON. I used to know a little bit about the oil and gas business, but under the classic definition of dumping, they have got to sell in our market below their cost of production in their market, and the Saudis could make money at $5 a barrel. So, under classic definition, there is not dumping. There is obviously a surplus of oil on the market, but I don't believe anybody is bringing any kind of an antidumping case, because literally they can produce it and ship it to us and make money at very low prices.

Mr. SHIMKUS. Do we import refined gasoline?

Mr. MONIZ. Yes.

Mr. SHIMKUS. I mean, I have been told that in the district. So, as we do that, even if we import oil, our refineries are closing down, or are threatened to close down, because if we are importing the gasoline, we are no longer even refining the oil. Again, that is another national security issue.

Mr. BARTON. That will be another hearing.

Mr. SHIMKUS. Another hearing, good. I like hearings.

So that is going to be a concern that I want to focus on. Again, I guess for that purpose, as we said in the Army, it is a warning order that this is of great concern to my district and the issue of national security.

Mr. Chairman, I have two other areas that I want to move into real quick.

Mr. BARTON. You are our last questioner, Congressman Shimkus. So, as soon as you are through, I am going to release the witness.

Mr. SHIMKUS. Okay. Following up on energy security, the biodiesel legislation that passed and was signed into law, I would like to know—of course, the Department has to promulgate the rule. What is the status on the rule for biodiesel?

Mr. MONIZ. The Department plans to issue an interim rule that will take effect in the March-April timeframe.

Mr. SHIMKUS. Be careful when you use dates. I mean, we are rabid on dates on this committee. So March-April?

Mr. MONIZ. March-April. Can I spell it April?

Mr. BARTON. Of this year, 1999?

Mr. SHIMKUS. Thank you, Mr. Chairman.

Mr. MONIZ. Of course, then there will be a comment period on that rule.

Mr. SHIMKUS. Now that biodiesel is an approved fuel under EPACT, is it safe to assume that DOE will now begin collecting data on biodiesel fuel use?

Mr. MONIZ. I actually thought we had, but perhaps I am mistaken. No? I am sorry——

Mr. SHIMKUS. Well, the issue is you do it for all the other fuels, and I think it would be helpful if you looked into doing it for the biodiesel.

Mr. MONIZ. Okay. I think this year we are planning to invest roughly $50 million in biofuels development in general, and certainly it is a direction that we want to emphasize. So we take your suggestion.

Mr. SHIMKUS. And the last thing that I want to address—and I was on the floor because part of the committee process was the 911 emergency bill. So I apologize for not being here earlier.

I want to address the interim storage site and, actually, the lawsuits filed by the utility companies, and the judgments ruled by the courts. Where is the budget amount of payment for these liabilities, and where are they as a line item?

Mr. MONIZ. Actually, probably the CFO wants to address that.

Mr. SHIMKUS. He probably doesn't want to, but——

Mr. MONIZ. I would just note that internal estimates are of potential damages in the half billion to billion range. We understand there are higher estimates by others. How any judgments would be

covered is an issue that we are discussing with the Department of Justice.

Mike, do you want to add to that?

Mr. BARTON. That is a question that the Chair was going to ask in writing. So we look forward to hearing your answer to this.

Mr. TELSON. I think you would be better off with it in writing, but payments with a judgment fund are made under a permanent appropriation, but they do come out of the judgment fund. They are made out of the permanent appropriation.

Mr. BARTON. We have a judgment fund?

Mr. TELSON. The United States has a judgment fund to pay for defaults and——

Mr. BARTON. Well, is the Department preparing a submission of liability to submit to the judgment fund?

Mr. TELSON. Mr. Chairman, I would like to have our General Counsel—they have been handling this whole issue. So I would like to have them be able to comment on that.

Mr. BARTON. Well, this was a subject at our hearing on H.R. 45, and at that time the senior Department of Energy official was very ambivalent about where the money was coming from. There was some discussion about it coming from the waste depository, the waste fund itself——

Mr. TELSON. No, it has not been determined. That is why we——

Mr. BARTON. Former Chairman Dingell had a number of questions on this also. So we are going to seriously look forward to hearing—we want to get that lined out, where that money is going to come from.

Mr. MONIZ. We will respond in writing, Mr. Chairman.

[The following was received for the record:]

The Department has not included any line item in the budget for these liabilities. Although the Court of Federal Claims has ruled in favor of three utilities, the court has not yet decided what damages should be awarded to these utilities. It has not yet been determined whether the damage awards should be paid from the Nuclear Waste Fund or from the Judgment Fund. The Office of Legal Counsel at the Justice Department is currently analyzing that question.

Mr. MONIZ. Again, I would just add that there certainly are discussions going on with the Department of Justice in terms of how would approach this issue.

Mr. BARTON. Right. We understand.

Mr. SHIMKUS. A better solution would be to get onboard and move the interim storage site, and not incur these liabilities.

I yield back my time.

Mr. BARTON. I thank the gentleman.

We are going to have a number of written questions. I have got 10 pages of written questions that I am not going to belabor.

I want to thank you, Mr. Under Secretary here, for being gracious and willing to stay while we had to go vote.

Please, again, encourage Secretary Richardson to accept the invitation to meet with myself and Mr. Hall, Mr. Bliley, and Mr. Dingell on H.R. 45, because we want to at least give the Secretary the opportunity to have a dialog, if he so wishes, before we begin our open markup process.

This hearing is adjourned.

[Whereupon, at 12:20 p.m., the subcommittee was adjourned.]

[Questions, in addition to those below, were sent to the Department of Energy, responses were not received at time of publication.]

[Additional material submitted for the record follows:]

DEPARTMENT OF ENERGY RESPONSES TO QUESTIONS FOR THE RECORD

QUESTIONS FROM CHAIRMAN BARTON

Nuclear Waste Disposal

Question 1: The Department's proposal for Yucca Mountain requires annual appropriations that are significantly higher than historical appropriation levels. Assuming historical funding levels of $350 million, when will the permanent repository be ready to begin accepting spent fuel?

Answer 1: The funding levels in the President's fiscal year 2000 budget request are sufficient to support a site suitability determination in 2001 and, if the site is determined to be suitable, submittal of a license application in 2002. It is difficult to determine the extent to which the opening of a permanent repository would be deferred, based on a flat funding profile. As the Department has stated before the subcommittee, the constraints imposed by the Federal budget process have the potential to limit the availability of funding for the nuclear waste program in the outyears, particularly during repository construction. The Department has not fully analyzed the impacts of outyear funding at historical levels, but as a rough measure of the outyear impacts of such a funding profile, the Department estimates that approximately $10 billion is required from FY 2000 through 2010 to develop the waste management system described in the Viability Assessment report and the Total System Life Cycle Cost analysis. The Department desires to work with Congress to address this issue. In exploring any funding alternatives, the Department is committed to meeting two important objectives: not imposing undue burdens on either utility ratepayers or taxpayers, and ensuring that the revenues raised by the nuclear waste fee remain available to complete the job.

Question 2: In order to make the 2010 schedule for the permanent repository, what specific changes have been assumed from the historical appropriation trends, existing fee caps, and the budget rules? What is DOE's basis for making such assumptions?

Answer 2: Both the Department and the Congress have been aware for some time that the overall constraints of the federal budget process limit the availability of funding for the nuclear waste program in the out years. The recently released "Viability Assessment of a Repository at Yucca Mountain" provides the Department's current estimate of costs to construct and operate a repository. Funding at historical appropriation levels will not be adequate to pay Program costs during repository construction. Future budget requests for the Program have yet to be established and will be determined through the annual Executive and Congressional budget process. The Department would like to work with the Congress to ensure that the repository program is adequately funded. Two important objectives need to be considered: (1) the Federal Government does not impose an undue burden on either ratepayers or the taxpayers, and (2) the revenues raised by the nuclear waste fee remain available to complete the job of the safe management and disposal of nuclear waste.

Question 3: The DOE budget submission does not take into account the potential fiscal impacts of damage claims against DOE for its failure to accept spent fuel. Has the Department, in coordination with the Department of Justice, determined how these claims will be paid?

Answer 3: The Department of Justice, Office of Legal Counsel, is investigating how claims emanating from DOE's delay in accepting spent fuel should be paid, but has not yet issued an opinion identifying the proper method and source for paying such claims.

Question 4: It appears that DOE is proposing in the budget to use $39 million of the $85 million in Defense Nuclear Waste Disposal funds previously set aside by Congress for the purpose of interim storage. Does this request indicate the Department is pursuing some version of interim storage, or is the Department proposing to use those funds for a purpose other than that which Congress intended?

Answer 4: The Administration opposes pursuing any options that would jeopardize the existing geologic disposal policy by forcing resources to be redirected to interim storage development, rather than completion, by 2001, of the site characterization work needed to make a decision on the suitability of the Yucca Mountain site. The Viability Assessment, which was submitted to the Congress and to the President in December 1998, revealed no technical showstoppers. But, it did identify

additional scientific and technical work that is needed before a decision can be made whether to recommend Yucca Mountain as a site for a repository. The $39 million of prior year budget authority will be used to reduce the uncertainties in our understanding of Yucca Mountain. Specifically, we will continue to study the presence and movement of water through the repository block, the effect of water on the waste package, and the effect of heat from the waste packages on the hydrologic and geologic behavior of the site.

Question 5: What is the present balance in the Nuclear Waste Fund?

Answer 5: The present balance in the Nuclear Waste Fund as of February 28, 1999, is $7.7 billion. The data is derived from a report entitled "Nuclear Waste Fund Summary of Cash Balances," prepared by the Department's Office of Chief Financial Officer on a monthly basis.

Question 6: Does the Department plan to use the balance accumulated in the Nuclear Waste Fund for the permanent repository program?

Answer 6: The Nuclear Waste Policy Act established the Nuclear Waste Fund in order to "ensure that the costs of carrying out activities relating to the disposal of such waste and spent fuel will be borne by the persons responsible for generating such waste and spent fuel" [§ 111(b)(4)]. As required in section 302(d), Nuclear Waste Fund revenues can be used "only for purposes of radioactive waste disposal activities." Both the Department and the Congress have been aware for some time that the overall constraints of the Federal budget process limit the availability of funding for the nuclear waste program in the out years. The Department would like to work with the Congress to ensure that the repository program is adequately funded. It is important that funding alternatives not impose undue burdens on either utility ratepayers or the taxpayers, and that revenues raised by the nuclear waste fee remain available to complete the Department's waste management activities.

Energy Security

Question 7: I am pleased that the Department has established an Emergency Oil Task Force and is taking steps to assist our domestic oil industry. What specific actions is DOE taking to assist small independent operators, and how much funding is dedicated to this purpose in FY2000?

Answer 7: Specific actions taken to assist small independent operators and the corresponding funding in FY2000 include:

Assistance to Independents: focus on technology production problems identified by small operators by conducting cost-shared research with independents on marginal wells at risk of abandonment ($0.5 million).

Reservoir Class Demonstration Program Revisit: designed to encourage producers to use new techniques for prolonging the production life of mature oil fields, now under pressure for premature abandonment due to low oil prices. The program will revisit the nearly completed three reservoir classes to address new technology applications in different regions of the country ($6.6 million).

Preferred Petroleum Upstream Management Program (PUMP): start an on-line permitting project to enable States and independents reduce permitting costs and speed response time and to conduct limited technology transfer of best reservoir management practices for production and environmental compliance ($0.5 million).

Streamline State/Tribal/Federal Regulations: enhance cooperative efforts with states, tribes and Federal agencies to streamline environmental regulations and regulatory processes without compromising environmental protection. Generate independent quality scientific data to help implement national policy in streamlining and improving existing regulations and laws ($1.6 million).

Technology Outreach: support regional workshops through the Petroleum Technology Transfer Council (PTTC), provide complete packages of applicable results from Reservoir Class Demonstration and other projects, assist operators in extending reservoir life, improve efficiency and coverage in electronic and hard-copy dissemination of publications and software, and expand schedule of exhibits at professional meetings ($2.9 million).

Approximately one-third of the FY2000 Oil Technology budget applies directly to small independent operators, with the remainder also applicable to other segments of the petroleum industry, including exploration, production and oil services.

Strategic Petroleum Reserve

Question 8: I understand that DOE has decided to add 28 million barrels of oil into the Strategic Petroleum Reserve. Are there plans to store additional quantities of "Federal Royalty Oil" in the Reserve?

Answer 8: To date, the Administration has only decided to transfer 28 million barrels of royalty oil to the Department of Energy. We are conducting an interagency study on the appropriate size of the Strategic Petroleum Reserve that we anticipate

completing this summer. If we reach the conclusion that the Reserve inventory should be greater than 590 million barrels we would then address the issue of how to best obtain the oil.

Energy Security

Question 9: The budget request includes $50 million for research and development on oil production technologies. Please explain in more detail what activities will be conducted with these funds?

Answer 9: The Oil Technology Program conducts a broad range of research and field demonstration activities designed to enhance the efficiency and environmental quality of domestic oil operations. These R&D activities are conducted in partnership with universities, State and local governments, industry and other organizations. Private sector participation is emphasized through industry cost-sharing with individual companies and consortia to ensure relevance and to facilitate the transfer of technology to the private sector while leveraging Federal R&D investment.

These activities are carried out under three major areas: exploration and production, reservoir life extension and management, and effective environmental management. Following is a more detailed description of activities in each area:

Exploration and production research consists of exploration and advanced drilling, completion, and stimulation systems, advanced diagnostics and imaging systems, the Multi National Lab/Industry Partnership, reservoir efficiency processes, and planning and analysis efforts.

- Exploration work aims to stimulate activity in currently underdrilled areas and in untested formations within older producing areas
- Advanced drilling, completion, and stimulation work focuses on developing tools and techniques to drill, complete and stimulate oil wells that can achieve and maintain higher production rates.
- Advanced diagnostics and imaging systems work focuses on the development of technologies and methodologies that improve success rates and cost efficiencies for the development of existing fields and the discovery of new fields.
- Multi Lab/Industry Partnership activities represent an industry driven program utilizing a wide range of tools developed for the defense programs and adapted to oil and gas use to improve seismic, production, drilling, and environmental technology.
- Reservoir efficiency processes include research to develop and demonstrate tools and methodologies that permit oil operators to recover hydrocarbons in mature reservoirs that are not producible by current technology. It also supports university research in extraction technologies with an objective on the development of scientific breakthroughs.

Reservoir life extension and management work focuses on coordinating oil technology activities in research, development, and demonstration of advanced technologies to improve recovery of hydrocarbons from mature oil reservoirs. Activities in this area include revisiting major reservoir groups to address key production problems, and increasing production from marginal wells. In FY 2000, activities will be initiated in the reservoir life extension and management area for a preferred Petroleum Upstream Management Practices (PUMP) Program. PUMP is designed to provide a short-term supplement to mid- and long-term R&D and will focus on data management and effective environmental compliance. PUMP will use known technology transfer mechanisms, regional approaches, and integrated solutions to technology, regulatory, and data constraints.

Effective environmental protection research activities focus on technologies and practices that reduce the threat to the environment and decrease the cost of effective environmental protection and compliance involved in exploration, production, and oil processing. In FY 2000, the program will focus on detection and control of air emissions from gas and oil equipment and facilities, treatment of produced water to meet environmental standards, remediation of soils contaminated with hydrocarbons or produced water, treatment and disposal of wastes containing naturally occurring radioactive materials, underground injection of produced water, and other approaches to manage oil and gas field wastes. Activities also include identification of pollutants present in petroleum and development of technologies to prevent their formation and to reduce emissions from petroleum fuels. Also, the program will implement, together with states and industry, on-line expert systems for environmental permitting and reporting that can save both producers and state regulators time and money. Through these activities with state governments and industry, the gas and oil environmental program can contribute toward decreasing cumulative industry compliance costs, between now and 2010, by as much as $16 billion, increase gas production by 90 billion cubic feet per year, and retain production of up to 140,000 barrels per day of oil that would otherwise be abandoned.

Question 10: The funding for coal and natural gas is down from Fiscal Year 1999. Yet Dr. Moniz's statement notes the "pressing environmental challenges of smog and particulate emissions, acid rain and global warming". In light of those challenges, why is the Department reducing its efforts on these fossil fuels?

Answer 10: The current reduction in FY 2000 reflects completion of the Low Emission Boiler Systems project in the Coal program ($12 million) and the use of prior year funds to finance a portion of FY 2000 requirements. In most areas this does not lead to a lower level of effort compared to that for FY 1999.

Fossil Energy's proposed research program has been developed to achieve the twin goals of a cleaner environment and a growing economy. The research proposed in the FE program can substantially reduce the burden of environmental costs by billions of dollars annually, while sustaining environmental progress. This means that the Nation can continue to benefit from fossil fuels at the same time that we continue to improve the environment, grow the economy and enhance our energy security.

Question 11: According to the Energy Information Administration, coal is the source of roughly half of the electricity generated in this country. If we start to lose a significant portion of our coal plants for air quality reasons, how will we replace that lost generating capacity?

Answer 11: To put the scenario posed in your question in context, we note that substantial reduction in emissions from coal-fired power plants have been achieved over the past two decades without leading to significant shutdowns of coal-fired capacity. EIA analyses suggest that further emissions-reductions required over the coming years by the acid rain provisions in the 1990 Clean Air Act amendment can also be achieved without endangering the economic viability of significant amounts of coal-fired capacity.

Taking the scenario posed in your question as given, three variables that would be crucial in understanding whether lost coal capacity could be replaced in a manner acceptable to U.S. electricity consumers would be:

(1) Growth in demand for electricity;
(2) The pace of replacement: how much coal would have to be replaced each year? and
(3) The cost of alternative technologies and fuels.

If electricity demand growth is high, and your hypothesized constraints on coal use are binding, then substantial natural gas capacity additions would be expected, along with associated increases in natural gas use and pipeline infrastructure requirements. These infrastructure and fuel use increases might be stretched to replace substantial amounts of coal capacity, without substantial price increases.

Finally, research and development into new technologies for electricity generation can also provide direct benefits in holding down the cost to America's electricity consumers should the scenario posited in your question come to pass.

Question 12: Can you explain the deferral of Clean Coal Technology funding for FY2000? Is the decision to defer these projects largely a Department decision, or is it coming from your industry partners?.

Answer 12: The proposed deferral resulted from schedule delays in the *Clean Energy Demonstration Project*—an Integrated Gasification Combined Cycle (IGCC) planned for Illinois and the *Clean Power From Integrated Coal/Ore Reduction (CPICOR)* project—a combined steel making and power generation project planned for Utah. These two projects have over $300 million in future funding requirements; however, the next funding requirements are not until fiscal year 2001.

Both of the extensions were made at the request of the industrial participant. For the Clean Energy project, the delay was necessary due to resiting of the project and the inclusion of the host utility as an equity partner in the project. The CPICOR delay resulted from a change in the technology vendor. Both projects are expected to begin construction activities in 2001.

DOE Asset Sales

Question 15. Have DOE contractors fulfilled their legal obligations to identify and dispose of surplus assets? Provide a legal opinion on the duty of DOE contractors to identify and dispose of surplus assets under their control. Provide a list of DOE contractors, indicating the value of DOE assets under the control of each contractor, whether each contractor has disposed of surplus assets over the past five years, and the value of any surplus assets disposed of by each contractor over the past five years.

Answer 15: Yes. DOE management and operating contracts contain a paragraph within the property clause 48 Code of Federal Regulations CFR 970.5204-21 Department of Energy Acquisition Regulation (DEAR) which requires, among other things, that the contractor disposition personal property as directed by the contracting offi-

cer. Both the 41 Federal Property Management Regulations, Chapter 101-43.101, "Agency utilization reviews," and the Department of Energy Property Management Regulations (DOEPMR) 41 CFR 109-43. 101, "Agency utilization reviews," require that contractors be responsible for continuously surveying property under their control to assure maximum use, and to promptly identify property that is excess to their needs and make it available for use elsewhere. Attachment I provides a list of DOE contractors by Operations or Field Office, demonstrates that each contractor has identified and disposed of surplus personal property over the past 5 years, and shows the value of surplus personal property assets disposed of by each contractor over the past five years. Attachment 2 provides a list of DOE contractors and indicates the value of personal property assets under the control of each contractor.

Total Value Of Any Surplus Assets Disposed By Each DOE Contractor

Field Office	Acquistion Cost FY 1994-MAY 1999
Albuquerque Operations Office	
Allied Signal	$152,002,000
Los Alamos National Lab	$216,452,747
Mason & Hanger	$79,939,731
Sandia National Laboratory	$236,494,785
Westinghouse (WIPP)	$8,482,192
Subtotal	$693,371,455
Chicago Operations Office	
Ames Laboratory	$955,490
Argonne National Laboratory	$48,696,734
Brookhaven National Laboratory	$21,489,712
FERMI National Accelerator Lab	$38,128,729
Princeton Plasma Physics Lab	$1,871,805
Subtotal	$111,142,470
Idaho Operations Office	
Idaho National Engr & Env Lab	$114,403,219
Nevada Operations Office	
Nevada Test Site	$21,362,800
Oak Ridge Operations Office	
Bechtel Jacobs (ETTP)	$25,662,120
Lockheed Martin Energy Sys	$5,419,470
Lockheed Martin Energy Res	$9,876,300
Thomas Jefferson National Accel	$3,646,572
Oak Ridge Associated Univ	$1,388,418
Subtotal	$45,992,880
Oakland Operations Office	
Lawrence Berkeley National Lab	$12,300,000
Lawrence Livermore National Lab	$150,000,000
Stanford Linear Accelerator Center	$11,900,000
Subtotal	$174,200,000
Richland Operations Office	
Hanford Site-Fluor Daniel Hanford	$154,930,246
Savannah River Operations Office	
Savannah River Site Westinghouse	$151,879,000
Golden Field Office	
National Renewable Energy Lab	$5,879,946
Ohio Field Office	
Fernald Environmental Mgmt Proj	$23,213,251
Mound Site	$78,535,450
Ashtabula	$157,243
West Valley Project Westinghouse	$3,747,739
Subtotal	$105,653,683
Rocky Flats Field Office	
Kaiser Hill LLC	$114,849,460
Federal Energy Technology Center	
FETC-DOE	$25,783,537
Amax Research & Development	$1,915,200
Bartlesville Research Facility	$762,078
Subtotal	$28,460,815
Strategic Petroleum Reserve Project Office	
Strategic Petroleum Reserve	$4,175,958

Total Value Of Any Surplus Assets Disposed By Each DOE Contractor—Continued

Field Office	Acquistion Cost FY 1994-MAY 1999
Pittsburgh Naval Reactors	
Bettis Atomic Power Laboratory	$11,754,174
Schenectady Naval Reactors	
Knolls Atomic Power Laboratory	$14,656,545
GRAND TOTAL	$1,752,712,651

Contractor Held Property

U.S. Department of Energy Property Information

Contractor Held Property

Site Location	Personal Property Categories						Site TOTALS		Current Data as of:	
	Equipment (> $24,999		Equipment < $25,000		Sensitive Items					
	Qty Items	Acq. Cost	Qty Items	Acq. Cost	Qty Items	Acq. Cost	Qty Items	Acq. Cost	System Status Date	
Ashtabula Reactive Metals, Inc. (RMI)	37	3,220,112	206	2,045,188	614	951,327	857	6,216,627	16-NOV-98	
									12/01/1995 (A)	
Ames Laboratory Iowa State University	1,166	27,234,399	1,022	10,598,594	1,594	3,101,065	3,782	40,934,058	08-OCT-98	
									04/18/1997 (A)	
Argonne National Laboratory Univ. of Chicago Argonne National Laboratory	2,469	230,592,456	8,118	85,016,742	17,654	43,224,155	28,241	358,833,353	08-DEC-98	
									03/18/1998 (A)	
Bettis Atomic Power Laboratory Westinghouse Electric	1,764	289,131,401	3,734	42,999,340	5,505	2,805,296	11,003	334,936,037	18-DEC-98	
									06/12/1997 (A)	
Brookhaven National Laboratory Associated Universities Inc.	4,816	223,563,671	12,797	111,524,748	15,623	20,991,188	33,236	356,079,607	16-DEC-98	
									06/22/1994 (A)	
Bartlesville Research Facility	42	3,551,241	271	2,670,242	6,042	3,478,641	6,355	9,700,124	21-OCT-98	

BDM - Oklahoma									*06/16/1998 (A)*
Civilian Radioactive Waste Management System TRW Environmental Safety Systems	423	66,077,343	1,042	11,418,991	944	1,854,803	2,409	79,351,137	23-NOV-98 *05/01/1997 (A)*
East Tennessee Technology Park Bechtel Jacobs Co., LLC	2,748	224,243,369	3,464	42,079,963	3,048	7,591,689	9,260	273,915,021	23-FEB-99
FERMI National Accelerator Laboratory FERMILAB - University Research Association Inc.	1,175	73,960,505	6,258	60,075,153	9,943	17,924,783	17,376	151,960,441	11-NOV-98 *04/17/1997 (A)*
Fernald Environmental Mgmt Project FERMCO - Daniel Environmental Mgmt Corp	701	71,533,391	1,453	16,026,849	5,103	8,316,000	7,257	95,876,240	13-NOV-98 *07/01/1995 (A)*
Grand Junction Project Office (TAR & FOS) Wastren Inc.	81	5,679,313	316	3,298,855	4,081	5,291,651	4,478	14,269,819	09-NOV-98 *07/09/1998 (C)*
Hanford Site Bechtel Hanford, Inc.	462	56,538,509	739	9,023,363	1,298	3,404,306	2,499	68,966,178	30-OCT-98 *11/13/1998 (A)*
Hanford Site Fluor Daniel Hanford Inc.	7,380	2,652,870,343	9,246	108,552,389	4,552	11,869,556	21,178	2,773,292,288	04-NOV-98 *09/30/1997 (A)*
Hanford Environmental Health Foundation Hanfo.d Environmental Health Foundation	11	1,006,838	78	799,055	36	115,300	125	1,921,193	04-NOV-98 *07/01/1994 (A)*

Idaho National Engineering and Environmental Laboratory (includes SMC) Lockheed-Martin Idaho Technologies Co.	3,038	388,009,147	4,949	59,111,135	41,611	87,398,912	49,598	534,519,194	11-NOV-98 *12/15/1997 (A)*
Knolls Atomic Power Laboratory Lockheed-Martin Knolls Atomic Power Laboratory	1,119	169,039,309	1,922	23,133,816	2,262	2,505,385	5,303	194,678,510	17-DEC-98 *08/19/1994 (A)*
Kansas City Plant Allied Signal Aerospace Co	2,010	221,614,570	5,191	58,032,808	3,501	4,771,087	10,702	284,418,465	20-OCT-98 *04/28/1998 (A)*
Los Alamos National Laboratory Univ. of California Los Alamos National Laboratory	3,927	546,164,742	14,073	153,347,377	49,652	191,957,819	67,652	891,469,938	09-NOV-98 *11/01/1998 (A)*
Lawrence Berkeley National Laboratory Univ. of California at Berkeley	1,441	281,369,338	4,497	47,247,931	11,802	157,224,196	17,740	485,841,465	29-OCT-98 *12/31/1999 (A)*
Lawrence Livermore National Laboratory Univ. of California Lawrence Livermore National Laboratory	5,121	533,831,494	17,966	192,432,113	31,628	116,422,517	54,715	842,686,124	07-OCT-98 *01/06/1998 (A)*
Mound Site Babcock Wilcox Ohio (BWO), Inc.	714	81,320,477	1,531	16,380,733	3,687	10,256,891	5,932	107,958,101	05-OCT-98 *09/30/1998 (A)*
Nevada Test Site Bechtel Nevada Corp.	5,041	926,185,431	17,649	191,776,803	3,906	5,828,578	26,596	1,123,790,812	17-NOV-98 *06/30/1996 (A)*
National Renewable Energy	429	33,031,943	1,887	15,089,533	5,648	18,673,343	7,964	66,794,819	02-DEC-98

Laboratory Midwest Research Institute									*03/01/1999 (C)*
Oak Ridge Institute for Science and Education Oak Ridge Associated Universities	66	4,187,798	321	2,427,647	2,372	5,487,113	2,759	12,102,558	13-NOV-98 *02/18/1997 (A)*
Oak Ridge National Laboratory Lockheed-Martin Energy Research	2,661	336,490,514	5,806	66,645,637	12,914	35,022,732	21,381	438,158,883	30-OCT-98 *04/21/1995 (A)*
Pantex Plant Mason & Hanger - Silas Mason Co.	946	94,025,590	3,583	36,514,135	15,079	23,354,280	19,608	153,894,005	23-OCT-98 *09/11/1998 (A)*
Pacific NW Laboratory Battelle Memorial Institute	2,011	219,437,919	6,603	70,889,761	2,572	9,276,247	11,186	299,603,927	04-NOV-98 *02/06/1997 (A)*
Princeton Plasma Physics Laboratory Princeton University	400	62,510,261	1,382	14,101,589	2,128	5,300,179	3,910	81,912,029	07-OCT-98 *11/18/1997 (A)*
Rocky Flats Environmental Technology Site Kaiser-Hill LLC	1,005	111,376,735	4,099	44,310,752	21,662	63,798,762	26,766	219,486,249	03-DEC-98 *04/21/1997 (C)*
Stanford Linear Accelerator Center Stanford University	864	503,352,400	2,927	30,849,720	8,021	12,517,030	11,812	546,719,150	30-OCT-98 *01/06/1998 (A)*
Sandia National Laboratories Sandia Corp./Lockheed-Martin	6,280	629,800,431	22,099	244,608,176	26,790	134,928,464	55,169	1,009,337,071	10-NOV-98 *04/02/1998 (A)*

Strategic Petroleum Reserve - Louisiana and Texas	9	450,871	37	423,051	7,855	18,808,484	7,901	19,682,406	09-NOV-98
Dyn McDermott Petroleum Operations									*12/31/1997 (A)*
	2,521	217,160,222	8,255	92,999,763	18,966	34,336,519	29,742	344,496,504	14-OCT-98
Savannah River Site Westinghouse Savannah River Co.									*12/01/1993 (A)*
	211	14,445,277	1,023	11,250,199	7,224	16,988,485	8,438	42,683,961	29-OCT-98
Thomas Jefferson National Accelerator Facility Southeastern Universities Research Association (SURA/CEBAF)									*01/21/1997 (A)*
	129	9,899,305	322	4,236,127	2,522	6,444,216	2,973	20,579,648	05-OCT-98
West Valley Project Westinghouse West Valley Nuclear Services Co.									*05/04/1994 (A)*
	189	21,875,022	611	5,834,416	1,066	2,808,859	1,866	30,518,297	29-OCT-98
Waste Isolation Pilot Project (WIPP) Westinghouse Electric Company									*10/20/1998 (A)*
	565	4,781,419	170	1,673,742	1,716	688,727	2,451	7,143,888	14-OCT-98
Wackenhut Services at Savannah River Wackenhut Services at Savannah River									*03/01/1995 (A)*
	5,857	812,698,530	6,014	70,787,099	10,494	25,319,657	22,365	908,805,286	13-NOV-98
Oak Ridge Y-12 Plant Lockheed-Martin Energy Systems									*10/30/1998 (A)*

U.S. Department of Energy Property Information

Contractor Held Property Totals

Site Location	Personal Property Categories						Site TOTALS		Current Data as of:
	Equipment > $24,999		Equipment < $25,000		Sensitive Items				
	Qty Items	Acq. Cost	Qty Items	Acq. Cost	Qty Items	Acq. Cost	Qty Items	Acq. Cost	
Personal Property Category TOTALS	69,829	10,152,261,636	181,661	1,960,233,535	371,115	1,121,038,242	622,605	13,233,533,413	

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Question 16: Has DOE fulfilled its legal obligations to identify and dispose of surplus assets? Provide a legal opinion on the duty of Federal agencies to identify and dispose of surplus assets.

Answer 16: Yes. The Federal Property and Administrative Services Act of 1949, as amended, implemented in Title 41 CFR 101-43.101, "Agency utilization reviews," Federal Property Management Regulations, requires that every agency continuously survey property under its control to assure maximum use and to promptly make personal property that is excess to its needs available for transfer. All personal property that is excess to an agency is then screened by the General Services Administration (GSA) for use by other Federal agencies. DOE excess personal property is screened for reutilization within DOE as described in the DOE Property Management Regulations, 41 CFR Chapter 109-43.304-1.50, "DOE reutilization screening." After such a screening, remaining excess personal property is reported to GSA.

The Federal Property and Administrative Services Act of 1949, implemented in 41 CFR Subpart 101-47.2, as amended, "Utilization of Excess Real Property," and Subpart 101-47.8, "Identification of Unneeded Federal Real Property," Federal Property Management Regulations, requires that the Department annually survey its real property (land and facilities) to identify property that is underutilized or not being put to optimum use, and directs agencies to follow certain procedures with respect to any such property.

Question 19: How much surplus property has DOE donated to nonprofit organizations over the past five years?

Answer 19: DOE has donated over $258,000,000 in surplus property over the past five years.

PEIS Lawsuit Settlement Agreement

Question 20: The Department recently entered into a settlement agreement with the NRDC that requires the Department to establish a $6.25 million fund to provide grants to environmental groups monitoring DOE cleanup efforts. Where will these funds come from, and what is the Department's authority to make such grants? If DOE allows a third party to administer this grant program, as is specified in the settlement agreement, who in the Department remains accountable for how these funds are spent? How does the Department prevent the kind of abuses we discovered in the Nevada Project Office, where federal funds were used for lobbying rather than for objective analysis?

Answer 20: The initial funding ($1.25 million) for the Citizen Monitoring and Technical Assessment Fired (Fund) is provided from the Department's Defense Environmental Restoration and Waste Management account. The Department provided the initial $1.25 million for the Fund to RESOLVE, Inc. (RESOLVE), which was chosen as the Administering Organization of the Fund. After reviewing RESOLVE's financial management documentation pursuant to the settlement agreement, DOE transferred the initial $1.25 Million to RESOLVE in March 1999. The balance of the required funding ($5 million) is included in the Department's FY 2000 budget request now before Congress. In addition to the Department's usual authorities including the Atomic Energy Act and the DOE Organization Act, for payment of funds to public and private groups, Federal appropriations guidelines also provide that a court ordered settlement confers authority to fund projects such as those to be selected by RESOLVE.

The Department is firmly committed to ensuring strict adherence to the requirements of the settlement agreement, which limits use of the Fund to technical and scientific studies, and prohibits use of the Fund for litigation, lobbying, or fundraising. There are several means of Fund oversight. First, RESOLVE must provide an annual report to the Department outlining how the Fund is spent, consistent with OMB Circulars for the expenditure of public funds. Second, in the event that DOE requires an audit, it would be conducted pursuant to the normal procedures associated with the federal government grant-making process. Third, the Department has prohibited the use of funds for litigation, lobbying, and fundraising activities in the settlement agreement, as it Specifically states that funds may not be used for such activities. As Administering organization of the Fund, RESOLVE is responsible for determining that the Fund is used consistent with the intent of the settlement agreement. However, the Department will oversee RESOLVE's administration of the Fund. A DOE contracting officer (yet to be selected) will be responsible for determining that appropriated funds are used consistent with the intent of the settlement agreement. No money has yet been granted from the Fund by RESOLVE, but initial receipt of applications is expected by July.

External Regulation

Question 21: For several years now, this Committee has been advocating external regulation of DOE facilities and operations by the NRC and OSHA. In testimony before this subcommittee last May, then-deputy Secretary Moler agreed with us on the benefits of external regulation at DOE facilities and promised to work with NRC and OSHA to establish the scope, timing, and resource needs to implement external regulation. She also promised us that this interagency process would be in place by July 1998 and would be reflected in the FY2000 budget planning process. However, Secretary Richardson stated in a February 19, 1999, letter that DOE will complete the ongoing pilot projects and then put this concept on the shelf—not conducting any more pilots and not submitting any implementing legislation to Congress. Please explain the Department's apparent reversal on external regulation?

Answer: As noted in the Secretary's letter to Congress of February 19, 1999, a number of significant, unresolved issues were identified in the three regulatory pilots completed by DOE and NRC. A number of regulatory and cost uncertainties would need to be addressed before proceeding to submit any legislative proposal for transition to external regulation. As indicated in the Secretary's most recent letter of March 31, 1999, accompanying "working drafts" of two of the three pilot reports (for Lawrence Berkeley National Laboratory and the Receiving Basin for Offsite Fuel at Savannah River), the Department remains concerned about the "extent to which existing regulatory flexibility or exemptions would be available to effectively address the DOE's unique nuclear facilities and operations, and what potential impacts such uncertainties carry with them." The letter also noted that this issue—the degree of flexibility or exemptions that the NRC can actually afford in defining how the existing regulatory framework is applied to specific DOE facilities through a licensing process—"cannot easily be answered by the reviews contained in the enclosed pilot reports." In this letter, the Secretary concludes that "these potential impacts cannot be overstated and must be fully addressed before any regulatory transition is pursued."

Hanford Spent Nuclear Fuel Project

Question 25: Dr. Moniz testified before the Subcommittee on Oversight and Investigations last year regarding the Hanford Spent Nuclear Fuel (SNF) project, which, at that time was $600 million over budget and four years behind schedule. What progress has been on the Hanford SNF project since our hearing last year?

Answer: The Hanford Spent Nuclear Fuel Project has achieved significant progress since the establishment of the high confidence level schedule in the Fall of 1998. The current Project life cycle cost, based upon this schedule, is $1,720M which includes a deactivation cost of $133.5M. The proposed budget of $1.375B for the SNF Project reported in last year's testimony, reflected the known changes added to the current baseline at the time of the Congressional hearing. Subsequently, a re-estimate of the entire SNF Project was completed and validated to support the Tri-Party Agreement schedule commitments. This re-estimate resulted in the $1.586B baseline approved in December 1998. When added to the deactivation costs, the total life cycle cost is $1.720B. The validation of the SNF Baseline was accomplished over a three month period by a joint team consisting of Department employees, Contractors from FDH and DESH, and the EPA. The detailed Basis of Estimate and backup for each SNF subproject's proposed baseline was verified and validated as appropriate for the known workscope. Contingency requirements and identified risks were also evaluated during the review. Project expenditures from fiscal year 1995 to February of fiscal year 1999 have been $593M. Institution of a disciplined baseline change control process has resulted in improved controls on the use of funds. Expenditures are being tracked against the risks identified in the contingency analysis. As a result, the project is performing within its cost goals. Several technical issues have caused decreased schedule performance to date. However, the Department expects to recover the slippages in the project by the summer of 1999.

The status of significant activities are:

— The fuel characterization effort has been successfully completed and the final report was issued in March 1999. The cask/transportation sub-project has also been successfully completed.
— The K-West Basin Integrated Water Treatment System and the Fuel Retrieval System installation activities are on schedule for completion this fiscal year. Installation of the K-West Basin Cask Load Out System has been put on hold temporarily due to a potential technical problem, and plausible mitigative solutions are currently being evaluated.
— The Canister Storage Building construction is on schedule. Additionally, the acceptance testing for the Multi-Canister Overpack Handling Machine is also on

schedule. The Cold Vacuum Drying process equipment skid procurement has been awarded. However, the delivery schedules are very tight.

— Additional contractor operations staff are being hired and trained pro-actively to support various start-up activities. Major contractor performance improvements have been noted as continued attention is being focused in ensuring that seasoned personnel are in place to best serve the project needs.

The SNF project is on track to meet the Departmental commitment to start fuel removal from the basins by November 30, 2000.

Question 26: The contractors on the project—Fluor Daniel and Duke Energy—made a commitment to the Committee and to the DOE to complete this project on time and under budget or risk all of their profit. What is the status of this commitment?

Answer: Fluor Daniel Hanford, Inc., (FDH) and DE&S Hanford, Inc., (DESH) have both committed to complete the Spent Nuclear Fuel (SNF) Project on time and within budget. The U.S. Department of Energy, Richland Operations Office (RL) has modified the FDH prime contract (modification No. 062) that places Performance Agreement fee earned by FDH in fiscal year 1999 and 2000, at risk upon the successful start of fuel removal from the K Basins by November 30, 2000. FDH has also modified the DESH subcontract to flow this requirement down. Therefore, both organizations have put their respective portions of earned SNF Project Performance Agreement fee at risk on fuel movement.

In fiscal year 1998, the performance fee opportunity that was available on the SNF Project was $7.2M. In fiscal year 1998, FDH and DESH earned no fee. In addition to not earning fee, both FDH and DESH were penalized $351K through penalty clauses that were invoked in the performance agreements.

Question 27: It is the Committee's understanding that the subcontractor on this project, Duke Energy, is now trying to get out of the contract. What is the status of this situation?

Answer: On February 4, 1999, Dr. Ernest Moniz (Under Secretary) and James Owendoff (Acting Assistant Secretary for Environmental Management) met with James Stein (President and Chief Operating Officer of Fluor Daniel) and Richard Priory (President and Chief Executive Officer of Duke Energy) to discuss the contractors' approach for managing this project. Fluor Daniel and Duke stated at this meeting that they remain fully committed to the success of this project.

As a follow up to this meeting, Mr. Stein and Mr. Priory provided additional details of their plan. In brief, the contractors proposed a change to the contractual relationship of Fluor Daniel as prime contractor and Duke as major subcontractor for the spent fuel project, to a relationship where Fluor Daniel will be directly responsible for project execution and Duke Energy would provide technical support through a staff augmentation type subcontract. This change was subsequently made.

Consistent with commitments made by senior management from both Fluor and Duke to DOE/HQ and DOE/RL, the DESH transition has been completed without any cost or schedule impacts to the SNF Project. Specifically, the transition included:

* The transition of the DESH Subcontract is not a termination.
* The DESH contract will remain a cost reimbursement, performance fee based subcontract.
* Effective August 1, 1999, DESH transitioned from the major subcontractor for SNF to a staff support subcontractor to FDH. FDH is now responsible for execution of the SNF project and DESH provides human resources to fill work scope tasked by FDH. The existing subcontract between DESH and FDH has been modified accordingly to accommodate this transition. Notwithstanding any changes made in the subcontract, for the staff augmentation scope, the continuing rights and obligations of DESH as the performing entity prior to August 1, 1999 remains unchanged.
* Consistent with commitments made to Congress, DOE/HQ, and the DOE/RL all fee earned by DESH on the SNF Project will be contingent on the movement of fuel in November 2000. As in the past, the fee DESH earns will come out of FDH earned fee and will not be billed as a separate direct cost back to the DOE/RL. Also, consistent with commitments made, DESH's subcontract has been extended through September 30, 2001.
* Currently, DESH supports the SNF Project and the TWRS Project with approximately 200 DESH employees. These employees have been transferred over to FDH (~180) for the SNF work scope and LMH (~20) for the TWRS work scope. The only change in this employee transition is that the employees have changed the name tags on their badge (i.e., DESH to FDH or LMH). There were no layoffs, involuntary reductions in force, or relocation of DESH staff. Therefore,

there were no costs associated with severance pay, pension costs, retirement, relocation, cost of money, and travel.

* DESH also supports the SNF Project with approximately 30 DE & Services, Inc., staff (Home Office Personnel). These are staff that are on full time assignment to the SNF Project. There will be no change with these staff. They are still being utilized through the existing subcontract relationship between DESH and FDH at no increased cost to the SNF project.
* Currently, DESH is also supporting the SNF Project with approximately 30 DE& Services, Inc., temporary staff who are here on short term assignments. These resources will continue to be utilized as necessary and will also be accessed through the existing subcontract relationship between DESH and FDH at no increased cost to the SNF project.

DOE has made it clear that, regardless of the contractual relationship, DOE expects Fluor Daniel to hold Duke and itself to the commitments made to the Committee on this project, and to assure that the necessary technical experts are made available to achieve a successful outcome.

QUESTIONS FROM THE HONORABLE TOM COBURN

Strategic Petroleum Reserve

Question 1: Dr. Moniz, I realize the Department has instituted a 28 million barrel Strategic Petroleum Reserve increase from the market in lieu of payments, but what is the real effect this will have on the oil market? Will this move help to bolster falling prices and is it believed to help the independent oil producer?

Answer 1: The reasons that the Administration is acquiring royalty oil for the Strategic Petroleum Reserve now are that we want to enhance energy security by replacing the oil that was sold from the Reserve in fiscal years 1996-97, and that we want to be prudent by doing it while prices are low.

The direct price effect of transferring 28 million barrels of royalty oil over the course of a year is expected to be negligible.

Question 2: By my calculation the 28 million new barrels accepted into the Reserve will give us a total of 589 million barrels of oil in reserve. What is the future plan of DOE in regards to the Strategic Petroleum Reserve? Would it not be wise to try and fill the Reserve with oil at this time to a level of 680 million barrels based on a two pronged effect: (1) It take more oil off the market and would help shore up prices, and (2) we make a wise business decision to get the oil at historically low prices.

Answer 2: The Administration is conducting a study of the appropriate size level of the Strategic Petroleum Reserve that we expect to complete this summer. Our policy on adding more oil to the Reserve will be determined after its completion. However, it is not our policy to try to influence oil prices, and the Energy Policy and Conservation Act specifically directs the Department to acquire oil in a manner to minimize the impact upon supply levels and market forces. It is both good policy and our intent to act in a business like fashion and acquire oil only at favorable prices.

Fossil Energy R&D

Question 3: I noticed a request that actually decreases the Fossil Fuel R&D account by about $20 million dollars from 1999. What are the specific reasons that the request is lower and would it not be wise to actually increase the R&D account given the struggles domestic producers are having and the fact that projections indicate a heavy dependence on foreign oil? Is this an indication of how the administration feels about the fossil fuels industry?

Answer 3: Although there are several small increases and decreases in the Fossil Energy Congressional Request, the two major reasons for the overall decrease are completion of the Low Emission Boiler Systems project ($12 million), and the use of prior year funds to finance a portion of FY 2000 needs ($11 million.)

The overall Fossil Energy R&D budget request reflects a balancing of budget priorities by the Administration, given restrictive budget caps.

Oil Dependence

Question 4: I am very alarmed by the statistics that indicate imported oil will rise to over 16 million imported barrels a day by the year 2020 accounting for 66% of oil consumption in the United States. While these are bleak projections the amount requested for Energy Resources programs only is increased $6 million dollars. It is my understanding that the Energy Department's security strategy relies on this money to help develop technology to increase energy efficiency and reduce energy demand. The projections indicate this plan is a failure. Is the meager request for an increase a sign that the DOE believes the energy security plan is a failure? If

so, why have we not looked at a more vigorous avenue to fight foreign oil dependence?

(Note: The 66 percent dependence on imported oil is for 2010 according to the *Annual Energy Outlook 1999* by EIA. Their estimate for 2020 is 71 percent reliance on imported oil. In addition, EIA projects that imports will be almost 11 million barrels per day in 2010, and almost 12 million barrels per day in 2020)

Answer 4: Two-thirds of the oil used by the U.S. is for the transportation sector. The Department is requesting $305.5 million for transportation technologies to develop technologies that will reduce our dependence on oil. If the current programs of the Office of Transportation Technologies (OTT) are successful, it is estimated that demand will be reduced by 1.8 million barrels per day off the projected 2020 oil use for the U.S. But, every barrel of oil reduced in transportation does not translate into a barrel of reduced oil imports. Therefore, reducing the projected 71 percent dependence on imported oil for 2020 will require even greater attention to efficiency improvements, substitutions, and enhanced domestic production.

That is why the budget request also includes $50.2 million for research and development on oil production technologies. Fossil Energy's Oil Technology Program conducts a broad range of research and field demonstration activities designed to enhance the efficiency and environmental quality of domestic oil operations. These R&D activities are conducted in partnership with universities, State and local governments, industry and other organizations. Private sector participation is emphasized through industry cost-sharing with companies and consortia to ensure relevance and to facilitate the transfer of technology to the private sector while leveraging Federal R&D investment.

Climate Change

Question 5: While Fossil Fuel R&D decreases by $20 million, which helps producers find new ways to produce oil more cheaply, the Climate Change Technology Initiative (CCTI) is increased $22 million. How can we be sure this increase, and for that matter, the rest of this funding, is not being used to promote an unratified Kyoto treaty? What are some assurances that you can give me for the record that this money will not be used to foster implementation of this treaty while it has not been ratified?

Answer 5: Fossil Energy has two related programs contained in the CCTI: advanced clean, efficient, fuel flexible, power generation technologies (Vision 21) and carbon sequestration research. Neither is directly related to the Kyoto Protocol, and none of the funding is used to implement the Protocol. Both of these programs are targeted to produce a suite of practical technologies for deployment in the 2015 time frame, with significant expansion in scope and reduction in cost for sequestration in the following decade. These technologies will provide cost-effective tools for reducing carbon emissions generally, without respect to the specific targets in the Kyoto Protocol. The Kyoto agreement focuses on binding national commitments, and R&D programs such as these are not part of it.

QUESTIONS FROM REPRESENTATIVE RALPH N. HALL

Emergency Oil Task Force

Question 1: Mr. Secretary, in November you formed a DOE emergency task force to address the price crisis being faced by America's independent oil and natural gas producers. Nearly 50,000 U.S. oil and gas industry jobs have been lost since November 1997 and almost 200,000 wells have been permanently shut-in.

I'm aware of the initiatives DOE has announced to help including refilling the 28 million barrels of oil sold from the SPR by initiating a royalty-in-kind program and providing technical aid and efficient energy programs to domestic producers. I also understand you may announce a DOE/SBA effort to publicize a program offering loan guarantees for domestic producers and their capital providers.

I congratulate you on these efforts but I'm afraid that much more is necessary. One can argue that America's oil producers are facing the same crisis as America's farmers and steel manufacturers. However, President Clinton and Vice President Gore haven't uttered a word about the serious economic and national security threats posed by this price downturn. Why haven't we seen the White House, the Treasury Department and other agencies take a stronger and more visible position in support of far-reaching initiatives to help this struggling industry? When will the rest of the Administration begin publicly discussing ways to avert the loss of significant amounts of America's onshore lower 48 states domestic oil production and the attendant risk to future natural gas development industry?

Answer 1: We agree with you that the latest round of low oil prices presents a severe problem to domestic petroleum production. This is a vital industry that is integral to the energy and economic security of our country.

With respect to your question about White House involvement, Secretary Richardson chaired a meeting at the White House to address these issues on March 16, 1999. John Podesta, the President's chief of staff, Gene Sperling, chairman of the National Economic Council, Bob Rubin, Secretary of Treasury, and Secretary Richardson met with representatives of the petroleum industry to hear their concerns and discuss possible actions. One of the first tangible accomplishments from that meeting was the establishment of a special energy working group within the National Economic Council. This group has brought in high level representatives from all agencies within the Administration to address important energy issues. We expect this group to make a real contribution in terms of creating a forum where important issues affecting the petroleum industry and other energy industries, can be discussed with all important government officials.

Question 2: Again, referring to your task force. Do the members of the task force have other recommendations that will go further and provide substantial relief for the industry? Has DOE been working with the Treasury Department on tax relief measures? If so, please elaborate.

Answer 2: Yes, they do. The work of the task force is an ongoing process where new ideas or initiatives to aid the industry are being considered. For example, since releasing its first report DOE has begun working with the U.S. Department of Agriculture to determine if their loan guarantee program for businesses in rural areas could be expanded to include oil and natural gas businesses.

With respect to tax relief, DOE and the Treasury Department has been closely following the tax proposals currently in Congress. The two agencies have discussed the pros and cons of these proposals, and are anticipating serious consideration of them in Congress. DOE has offered to work with Congress in its efforts to develop the most cost-effective and efficient proposals possible.

Question 3: The Clinton Administration has consistently touted its global climate change agenda—an agenda which most in Congress do not support. One of the key elements of that agenda is a substantial increase in domestic natural gas production. Has anyone in the Administration recognized the implications of the current oil price crisis on this natural gas agenda?

Answer 3: Yes, we are concerned with the potential impact of low oil prices on future domestic production of natural gas. The Energy Information Administration (EIA), in its Annual Energy Outlook for 1999, presented findings from sensitivity analyses it did on the effects of low oil prices that indicate that low prices may not significantly impair domestic gas production in the future.

FOR 2020

	Oil prices	NG prices	NG production
EIA Base Case	$22.73/bbl	$2.68/mcf	27.4 TCF
EIA Low Oil Price Case	$14.57/bbl	$2.62/mcf	26.9 TCF

As can be seen from this data for the year 2020, EIA forecasts that domestic gas production will be basically unchanged whether oil prices are $22.73/bbl. (all in constant 1997 dollars) or $14.57/bbl.

Having said this, we are still concerned with this important issue. We expect the National Petroleum Council, which is currently conducting a study of future gas supplies in the U.S., to give us their assessment of the implications of low oil prices. The results of that study should be conveyed to DOE in the Fall of 1999.

Question 4: Some of your predecessors viewed DOE's Fossil Energy programs, particularly the oil and gas program, as a source of additional funds for other programs. I am pleased to see that you have made a slight increase in Fossil Energy's oil research and development program. Can we count on DOE to continue fully funding this program? Will you fight to maintain this program when congressional appropriators attempt to rob this program to fund more popular programs such as Energy Efficiency?

Answer 4: I fully support the Fossil Energy FY 2000 budget request. I believe that the oil and gas program budget level is appropriate and balanced in light of current budget constraints. I also support the FY 2000 budget request for Energy Efficiency and believe that it is appropriate and balanced, too. I will support maintenance of both programs.

QUESTIONS FROM REPRESENTATIVE NORWOOD

Purchase Power and Wheeling

Question 1: Has the Administration made a policy decision to terminate wholesale power contracts with existing preference customers by eliminating funding for purchase power and wheeling?

Answer 1: No. The Administration has made no policy decision to terminate existing wholesale power contracts. On the contrary, the Administration expects and intends that the PMAs will continue to perform critical purchase power and wheeling activities as necessary to fulfill their contractual commitments. The sole purpose of the Administration's proposal to eliminate appropriations for purchase power and wheeling is to correct an anomaly in the appropriations process. This anomaly unfairly weakens and jeopardizes the PP&W function—a situation which the Administration's proposal would correct. The Administration recognizes that the financing methods used to firm Federal power and wheel it to users must take into account the individual situations found at each PMA power system. The Administration is open to other ideas that provide a permanent solution for financing this activity without relying on scarce appropriations.

Question 2: What happens to the contracts for transmission service if funds are not provided in the budgets for the PMA's?

Answer 2: It is the Administration's intention that funding will be available, without appropriations, for the continuation of contracts for firming energy and transmission services. Currently, more than half of the PMA purchase power and wheeling activity is funded without appropriations, through existing off-budget, alternative financing methods, including net-billing, bill crediting and reimbursable authorities. Off-budget financing of the remaining portion of the programs is anticipated from customers. We understand that the Administration's proposal has generated some concern among current suppliers and customers. Adequate funding of firming energy and wheeling services is vital to the ability of the PMA's to meet contractual firm power delivery requirements. In the event we are unable to achieve sufficient alternative financing given the time constraints, we plan to work with the Congress prior to the start of FY 2000 to develop other solutions.

Question 3: If the PMAs do not have funds for purchase power, can they continue to sell firm source power? And if they cannot sell this power, will they be able to still generate the same amount of revenues?

Answer 3: Purchase power is vital to a PMA's ability to market the variable hydro generation as a firm energy resource. Without purchase power funding, the ability to market firm source power would be greatly reduced, possibly to zero for some projects. Non-firm sales on the other hand would be greatly increased, raising concern over the ability of the PMAs to secure adequate revenue under such a scenario, as the burgeoning non-firm products, representing a much higher percentage of sales, would be sold at spot-market prices, which are generally less than firm power prices. There have been times when surplus hydroelectric energy had no monetary value in northern California due to market saturation during high flow periods.

However, the Administration's proposal does not intend to eliminate the purchase power *function* of the PMAs; rather, it is an attempt to move the funding responsibility for these vital functions from the uncertain appropriations process to those that benefit and pay for the services—the PMA power customers.

Question 4: Did you check on the law when you made this decision? Because it is my understanding that there is some question as to whether the Department of Energy will be able to comply with the Flood Control Act.

Answer 4: The Flood Control Act requires that the PMAs transmit and dispose of the power from Flood Control projects on a widespread basis consistent with sound business principles. As a matter of policy, the PMAs market their power consistent with this mandate, and the Administration's FY 2000 Purchase Power and Wheeling financing proposal intends to continue this policy. We do not believe that the FY 2000 proposal violates any provisions of the Flood Control Act, since the proposal is only shifting the responsibility of financing purchase power and wheeling from appropriations to customers.

Question 5: If the General Counsel's office had advised your budget personnel that eliminating the funding for purchase power and wheeling violated statutes governing the authority of the PMAs, would DOE still pursue this proposed change in funding?

Answer 5: No.

Question 6: Why has the administration made the apparent policy decision to raise electric rates for retail electric customers of municipal utilities and rural electric cooperatives that currently buy power from the federal government?

Answer 6: The Administration's proposal shifts the responsibility for funding the purchase power and wheeling program from the U.S. Treasury to those that benefit from the services—the PMA customers. The proposal does not eliminate the ability of the PMAs to perform these functions. If successful, we do not anticipate rate impacts to existing PMA customers. If funding arrangements cannot be accomplished, we plan to work with the Congress to provide other solutions.

QUESTIONS FROM REPRESENTATIVE WILSON

Waste Isolation Pilot Plant (WIPP)

Question 1: What is the current status of opening WIPP? When do you anticipate moving the first shipments of waste? What are the remaining barriers to opening WIPP and how can the Congress assist in removing these barriers?

Answer 1: The Waste Isolation Pilot Plant (WIPP) is open. The first shipment of waste from the Los Alamos National Laboratory arrived at WIPP on March 26, 1999. As of June 2, 1999, there have been nine shipments of non-mixed waste to WIPP from Los Alamos and one shipment of non-mixed from the Idaho National Engineering & Environmental Laboratory. Over the next several months, DOE plans to send additional shipments to WIPP from Los Alamos, Idaho, and Rocky Flats.

The Department's Resource Conservation and Recovery Act permit application for mixed waste for WIPP is pending before the New Mexico Environment Department (NMED). NMED's permit hearing concluded March 26, 1999. Based on the schedule announced at the close of the hearing, it appears that NMED will issue a final permit in November 1999.

DOE Budget Request for 2000

Question 2: What are the DOE estimates of annual liability costs for failure to accept spent fuel by January 31, 1998? How do you plan to accommodate, avoid or budget for these costs?

Answer 2: It is not possible, at this time, to estimate the "annual liability costs" for the delay in accepting spent nuclear fuel. The United States Court of Federal Claims has found in the cases brought by utilities with no operating reactors that the Department's delay constitutes a breach of contract. However, the amount of damages has not yet been determined.

We understand that the Department of Justice's Office of Legal Counsel is conducting an analysis to determine how to properly treat these costs. The Department cannot plan for accommodating and budgeting for these costs until the Office of Legal Counsel has completed its review.

Question 3. What is the status of the dispute with the contractor for PIT-9? Does DOE plan to litigate this matter, settle it, or arbitrate it in some way? If no decision has been made about this particular course of action, what is the timeline for a decision on what course of action?

Answer 3. The dispute arising from the decision by the Department's management and operating contractor at INEEL, Lockheed Martin Idaho Technologies Company, Inc. (LMITCO), to terminate for default its subcontract with Lockheed Martin Advanced Environmental Systems, Inc. (LMAES) (the Pit 9 Subcontract). The Department was not a party to the Pit 9 Subcontract. Accordingly, the dispute is a private one between two subsidiaries of the Lockheed Martin Corporation. The Department's interest is secondary and, essentially, that of an entity responsible for the facility at which the subcontracted work was to be performed and for which the Department has reimbursed LMITCO for the $54 million paid by LMITCO to LMAES during the course of LMAES's ultimately failed performance—funds that LMAES and the Lockheed Martin Corporation are now obliged to return to LMITCO.

The dispute has given rise to two lawsuits. First, LMAES and Lockheed Martin Corporation have commenced an action in the United States Court of Federal Claims against the United States (but not specifically against the Department). Second, LMITCO commenced an action against LMAES and the Lockheed Martin Corporation in the United States District Court for the District of Idaho, to which the Department is not a party.

In the Court of Federal Claims action, LMAES and the Lockheed Martin Corporation has challenged the default termination, contending that the termination was effected by the Department and not by LMITCO. The United States has filed a motion to dismiss the Court of Federal Claims action because (i) there exists no privity of contract between the United States and LMAES or the Lockheed Martin Corporation upon which to base a direct contract action against the United States, and (ii) no action undertaken by the United States Government has effected a cognizable taking of property of LMAES or the Lockheed Martin Corporation in violation of the

Fifth Amendment to the United States Constitution. That motion is pending before the Court.

The Idaho district court litigation is a private law suit between LMITCO, LMAES, the Lockheed Martin Corporation, and EG&G, Idaho, Inc. (LMITCO's predecessor as the INEEL management and operating contractor). LMITCO seeks to recover the $54 million paid by LMITCO to LMAES pursuant to the failed Pit 9 Subcontract effort which LMAES and the Lockheed Martin Corporation promised to return to LMITCO if LMAES failed to perform. LMAES and Lockheed Martin Corporation have subsequently challenged in the Idaho Court LMITCO's prior default termination of the Pit 9 Subcontract. The Department is not a party to that litigation. We understand that there have been discussions between LMITCO and LMAES and the Lockheed Martin Corporation. In addition, LMITCO has been exploring with the Department various mechanisms that might be available and appropriate to address issues raised by the Pit 9 subcontract dispute. Such an undertaking has been impeded, however, by the efforts of LMAES and the Lockheed Martin Corporation to have the Idaho litigation stayed (that is, consideration of its merits delayed) while they pursue their Washington, D.C. Court of Federal Claims action.

Question 4: Has DOE considered transmutation of spent nuclear fuel rather than long-term storage? If so, what were the conclusions of that assessment?

Answer 4: The Department of Energy commissioned the National Academy of Sciences in 1991 to conduct a study that evaluated transmutation of spent nuclear fuel. The Academy's report, published in 1996, stated that the current policy to dispose of spent nuclear fuel in a geologic repository should continue, and a once-through fuel cycle for commercial spent nuclear fuel should be maintained. The report found that accelerator-based transmutation may become available some decades in the future. But, even then, geologic disposal will be necessary to dispose of separation waste and activation isotopes.

QUESTIONS FROM CONGRESSMAN MARKEY

External Regulation

Question 1: A February 19, 1999 letter from Secretary Richardson to the Subcommittee Chairman regarding external regulation of DOE facilities states that in pilot projects "many of the potential benefits that we expected to see from external regulation have not been demonstrated and appear to be outweighed by associated costs and difficulties." What benefits were expected, and why have they not been seen? What are the costs and difficulties that were found?

Answer: The December 1996 "Report of the DOE Working Group on External Regulation, Chapter 5," summarized the expected benefits of external regulation. Key expected benefits included allowing DOE to focus on its primary missions and ensuring the establishment of a single set of standards and requirements appropriate to DOE's nuclear activities. The pilots conducted to date have highlighted the difficulties in establishing a single set of standards and requirements for DOE's nuclear activities—and the need to provide for regulatory flexibility and exemptions through any licensing process. These benefits have not been fully realized and, in our judgment, are outweighed by the potential cost impacts associated with the regulatory uncertainties that have been identified in the pilot program to date. Copies of two of the three pilot reports (Draft Report on the Pilot Project on External Regulation of DOE Facilities at Lawrence Berkeley National Laboratory and Draft Report on the Pilot Project on External Regulation of DOE Facilities at the Receiving Basin for Offsite Fuels, Savannah River Site) were delivered to DOE's committees of record on March 31, 1999, These draft reports contain details of both implementation issues and costs. Analyses of the results from these pilots is continuing. The report on the Radiochemical Engineering Development Center was issued and delivered to Congress on July 2, 1999.

Question 2: The letter notes difficulties upgrading facilities to meet NRC standards. NRC standards are intended to ensure the safety of workers and local communities. Is the Department reluctant to provide its workers and surrounding communities the same level of safety afforded those at private plants?

Answer: Definitely not. As noted in the draft reports, the issues are regulatory in nature. The safety assurances provided by existing DOE and NRC standards utilized by the Department provide at least an equivalent safety to that of the commercial industry. For those facilities where the pilots were performed, NRC confirmed this.

Question 3: The issues listed in the letter refer only to NRC regulation. Has OSHA oversight been easier to implement?

Answer: DOE continues to work with OSHA as well as with the NRC. With regard to the issues in the February 19, 1999, letter, most of the uncertainties and

issues being addressed were reflective of NRC requirements. However, some apply equally well to OSHA oversight. In terms of requirements, the Department already implements OSHA's regulations pursuant to a memorandum of understanding between the two agencies. The Department is pursuing several initiatives with OSHA to define the appropriate oversight of occupational safety at privatized facilities and on-Atomic Energy Act sites (e.g., fossil energy and energy efficiency facilities), as well as cooperative agreements to enhance occupational safety and health in DOE operations.

Renewables and Conservation

Question 1: According to your Department's excellent information source, the EIA, the amount of electricity generated from wind in the United States decreased from 11 million kilowatthours in 1995 to 6 million kilowatthours in 1997, and photovoltaics similarly decreased from 4 to 3 million kilowatt hours. Why has production from these emerging renewable energy sources decreased? To what extent are federal policies, state policies and competition in the electric industry responsible for what I hope is a temporary setback for these clean energy sources?

Answer: The most recent figures for the amount of wind and solar electricity generated in the United States can be found Table A17 of EIA's Annual Energy Outlook 1999, page 134. The figures for 1995 are in the same table in the same publication for 1998, page 122. The relevant portions of these tables are reproduced below:

Table A17. AEO 1998 and 1999 Renewable Energy Generation

(in billion kilowatt hours)

	1995	1997	2000 forecast	2020 forecast
Solar Thermal	0.82	0.90	0.95	1.44
Solar Photovoltaic	0.00	0.00	0.09	1.56
Wind	3.17	3.41	6.11	8.44

These tables show that wind generation increased almost 10 percent from 1995 to 1997. Although photovoltaic electricity is not yet generating in quantities large enough to be measured in billions of kWh, it continues its rapid growth. Energy Information Administration reports an increase of almost 50% in the number of kilowatts of photovoltaic cells and modules shipped by U.S. manufacturers from 1995 to 1997 (Renewable Energy Annual 1998.)

Question 2: Could you highlight a few recent accomplishments of the DOE renewable energy and energy efficiency programs?

Answer 2: The following list provides a brief summary of accomplishments of the renewable energy and efficiency programs.

- **Office of Building Technology State and Community Programs:** Consumer savings totaling more than $33 billion since 1978. A recent example is the Department's Energy Star program. In 1998, more than 50 manufacturing partners signed on to the **Energy Star** program to produce and label Energy Star windows, doors, and skylights. Currently, more than 2,000 retail store partners (including such giant national chains as Home Depot, Circuit City, and Montgomery Ward), 33 utilities, and nine major appliance manufacturers nationwide stock and promote **Energy Star** products.
- **Office of Industrial Technologies:** Over 100 energy saving technologies in the market, saving $2.1 billion since 1985. The Bethlehem Steel Corporation recently joined with the Department's Office of Industrial Technologies to showcase energy saving technologies for the steel sector. To remain competitive in the global marketplace, U.S. steel producers much reduce production costs while improving the quality of their products. A critical component of lowering overall production costs is reducing energy consumption during production. Bethlehem Steel's Bums Harbor, Indiana, steel mill will install six advanced steel making technologies and processes, that if implemented throughout the steel industry, could provide net energy savings by 2005 of over 93 million Btu per year, the equivalent of $198 million.
- **Office of Transportation Technologies:** Over 50 models of cars and trucks, using fuel efficiency technologies and alternative fuels are saving 2 billion gallons of conventional fuel a year, consumer savings since 1978 near $10 billion, oil savings near 20 billion gallons. The Department's Clean Cities Partnership Program is a voluntary, locally based, government/industry partnership to expand the use of alternative fuel vehicles (AFVs) and by building a local AFV refueling infrastructure. Over the past four years, 67 communities have joined

the Clean Cities effort, enabling deployment of more than 200,000 AFVs in both public and private fleets. The vehicles will reduce gasoline and diesel fuel use by an estimated 210 million gallons per year and emissions by an estimated 54,000 metric tons through 2005.

- **Federal Energy Management Program:** The Program has reduced annual Federal energy costs more than $800 million from projected 1985 levels. Additional taxpayer savings directly from EERE federal programs is nearly $1.5 billion. Award of five delivery orders under the Western Region Super ESPC will provide private sector investments of over $7 million for projects at Coast Guard, FAA, GSA, Forest Service, and VA facilities. The projects Will result in $14.4 million in savings to the government over the term of the delivery orders.
- **Office of Power Technologies:** Renewable energy costs are down 80% since 1980. Over $5 billion in U.S. produced renewable sales this decade. *World's Largest Wind Power Facility.* In 1998, Enron Wind Corporation began operation of the world's largest wind power facility, a project of 143 wind turbines. spread across 15 miles of farmlands near Lake Benton, Minnesota, for a total generating capacity of 107 MW. Enron has publicly credited their research partnerships with the Department as essential to the development of the technology making this wind plant possible. Enron's turbine manufacturing subsidiary, Zond Energy Systems Inc. of Tehachapi, California, partnered with the Department under its wind turbine research and field verification programs for the development of the Z-550, Zond's first commercial wind turbine. The advanced design tools, technical assistance, testing capabilities, and utility operating experience made possible by the Department's Wind Program were critical to the successful development of Zond's Z-750 turbine used in the Minnesota project. Enron Wind Corp. has several hundred additional megawatts of wind power now under development.

Nuclear Energy Research

Question 1: Dr. Moniz, if you believe in free markets, as I do, then government subsidies should be reserved for emerging industries that need initial support or for clear national interests.

a. Would you consider nuclear power an emerging industry or a mature industry?

b. I see that the DOE budget includes $5 million for a new program to extend the life of existing nuclear reactors, presumably beyond their 40 year licenses. After 40 years, why can't the industry fund its own research?

Answer: a. The nuclear power industry is a mature industry and we do not subsidize it.

b. Industry is investing over $80 million annually to conduct short-term nuclear power plant research and development. This work focuses on issues such as plant relicensing. The Nuclear Energy Plant Optimization (NEPO) program is focused on longer-term, higher-risk research and development aimed at improving the state of nuclear power technology in order to realize important strategic benefits for the Nation—such as the reduction of greenhouse gas emissions. Despite the fact that this program represents a longer-term technology investment than is generally funded by industry, the Electric Power Research Institute has committed to funding 50 percent of the research cost. We believe that achieving strategic benefits such as reducing air emissions is an important role for government and our proposed $5 million program represents a very modest investment for the future.

Question 2: The budget also increases funding for new reactor concepts to $25 million.

c. Given that no new reactor has been order and built for 25 years, what are the chances that any of these reactor will ever get built?

d. If you were CEO of an electric utility in a competitive industry, would you risk bankrupting your company to try to build a new nuclear plant?

Answer: a. The purpose of the Nuclear Energy Research Initiative (NERI) program is to maintain nuclear energy as a viable option for the future by addressing obstacles to long-term deployment of nuclear energy through improving plant economics, providing for proliferation resistant technologies, and addressing issues associated with waste.

b. Nuclear power plants are among the most efficient sources of baseload electricity available today, with operating costs averaging 1.9 cents per kilowatt-hour. True, the construction cost of past plants has been a major factor in the fact that no new plants have been built for many years, however we believe advances in technology—such as are pursued in the NERI program—can lead to plants that are cost competitive to build and operate.

QUESTIONS FROM REPRESENTATIVE SHIMKUS

Biodiesel

Question 1: Last year, the Congress passed legislation (P.L. 105-388) to reauthorize the Energy Policy and Conservation Act. Included in this bill was language directing the Department of Energy to issue a rule on the use of biodiesel in the alternative fuel vehicle program under Energy Policy Act. The deadline for rule issuance was January 1, 1999. What is the status of this rule? When does the Department expect to issue a rule, as directed by the Congress?

Answer: The Energy Conservation Reauthorization Act of 1998 amended the Energy Policy Act of 1992 (EPACT) to create a Biodiesel Fuel Use Credit. The Biodiesel Fuel Use Credit will allow for the allocation of an alternative fuel vehicle (AFV) acquisition credit for a specified amount of biodiesel fuel use by a fleet or covered person currently required to purchase a certain percentage of AFVs under EPACT's titles III and V.

Although the Energy Conservation Reauthorization Act was signed into law on November 13, 1998, it called for a rule to be issued by January 1, 1999. DOE regrets that the rule was not issued by the statutory date. The Department has issued an interim rule, which took effect on May 19, 1999. Although the interim rule would take effect fight away, DOE would also establish a comment period during which interested parties could comment on the interim rule. Those comments would be taken into consideration by the Department before issuing a final rule. We would expect to issue a final rule by fall 1999.

We are enthusiastic about realizing the benefits offered by increased use of fuels from renewable sources, and are expecting that this legislation is resulting in expanded sales of biodiesel fuel.

Question 2: As you know, the Department collects data for other fuels such as natural gas. Does the Department of Energy plan on collecting biodiesel fuel use data? Additionally, does the Department plan on holding training sessions, in cooperation with the biodiesel industry, for fleet managers who are interested in using biodiesel in their fleets? When will these meetings begin?

Answer: The Department does plan on collecting annual biodiesel fuel purchase data from those fleets choosing to utilize the biodiesel fuel use credit to meet, in part, their alternative fueled vehicle purchase requirements under the Energy Policy Act of 1992. We plan to revise the annual reporting form, DOE/OTT/101, Annual Alternative Fueled Vehicle Acquisition Report for State Government and Alternative Fuel Provider Fleets, so that State and alternative fuel providers can report their biodiesel purchases and claim credits. The Department also plans to amend the Federal Energy Management Program reporting form to allow Federal fleets to report their biodiesel purchases and claim credits.

The Department does not, at this time, plan to hold training sessions for fleet managers who are interested in using biodiesel in their fleets. We are hopeful that the issuance of the Interim Final Rule, be published in the Federal Register on or about May 19, 1999, will provide sufficient guidance to fleet managers regarding the biodiesel fuel use credit. However, if the biodiesel industry believes that some other form of guidance, be it training sessions, guidance documents or some other media, is necessary, the Department stands ready to work with industry to see that fleet managers have the information necessary to make informed decisions regarding the biodiesel fuel use credit.

QUESTIONS FROM CONGRESSMAN STRICKLAND

Worker and Community Transition Office

Question 4A. Your testimony indicates that the funding request for the Worker and Community Transition Office is $30 million. Frankly, I am concerned that this funding may be inadequate and I say this because I am well-aware of imminent layoffs at the gaseous diffusion plants this year. And, beyond July 2000, as I explained in my opening statement, there remains no restriction on the number of additional reductions in the workforces at the two sites. With that said, it is important for me to point out that the Department has a proposal from the Southern Ohio Diversification Initiative, the Community Reuse Organization in Piketon, Ohio, requesting just under $6 million for development of industry ready sites and parks. With that understanding, are you confident that $30 million will meet the needs of all of the DOE sites throughout the complex? If not, will the Department support a reprogramming necessary to meet the needs of sites like Portsmouth and Paducah?

Answer 4A. As you know, a formal agreement was signed between the Department of Treasury and United States Enrichment Corporation (USEC) limiting work force reductions at the Portsmouth, Ohio and Paducah, Kentucky gaseous diffusion

plants through July 2000. A parallel agreement between the Department of Energy and USEC established a $20 million fund to cover separation benefits to be provided to separated workers. In addition, funds from this account not required for worker benefits can be used to provide community assistance at these sites. We estimate that approximately $4-6 million will be available from this fund for community assistance purposes. Additional funding may be made provided from Worker and Community Transition appropriations based on established criteria and available funds.

In the event there are major work force reductions at Portsmouth and Paducah after July 2000 and that available funds would not allow for consideration of appropriate worker separation assistance, the Department would consider whether a reprogramming request was necessary.

P.L. 105-204

Question 1: P.L. 105-204 specifically calls for the Administration to submit with the President's FY 2000 budget request a plan and proposed legislation for implementing a depleted uranium hexafluoride program that includes the construction of conversion facilities at both the Portsmouth, Ohio and Paducah, Kentucky sites. Could you please explain why the Budget Request was presented on February 1, 1999 and it failed to include a plan or proposed legislation for implementing P.L. 105-204 when the law was signed by the President in July, 1998?

Answer: The *Initial and Final Plan for the Conversion of Depleted Uranium Hexafuoride* was submitted to Congress on March 12, 1999 and July 6, 1999, respectively. In the case of the initial plan, the Department used the extra time to analyze a wide range of possible activities and work with the Congressional delegations to ensure the plan met the intent of Congress. The final plan, also reviewed by the Congressional delegations, reflects the Department's review of the Expressions of Interest from the private sector and provides a more detailed, final schedule for the depleted uranium hexafluoride conversion project. This schedule provides for the construction of conversion plants two years earlier than anticipated by P.L. 105-204.

With respect to legislation, Public Law 105-204 required the Secretary of Energy to prepare proposed legislation for consideration by Congress. Other than funding legislation, the Department does not believe that additional legislation is necessary at this time. The Department will continue to consider whether additional legislation is advisable in light of future developments in the program.

Question 3: You state in your written testimony that "the Department expected to publish a formal solicitation for expressions of interest in construction of these plants within the next week." Could you possibly give me a target date when the Department will issue the expression of interest?

Answer: The Department issued the solicitation for Expressions of Interest for construction and operation of conversion plants on March 4, 1999. Expressions of Interest were received from the private sector on April 5, 1999. A summary of the Expressions of Interest were provided to Congress on May 13, 1999. The Draft Request for Proposal was published July 30, 1999, for comment.

Question 5: I would also hope that before a final plan makes its Way to the Hill, interested Members of Congress, such as myself and Mr. Whitfield will have the opportunity to review the plan and the legislation. Could you assure us that, in fact, we win have the opportunity to provide the Department with our input on the plan?

Answer: Yes. The Final Plan includes input from the affected Congressional delegations.

Question 6: As you may also know, I sent the Secretary a letter, dated December 4, 1998 which outline some of my suggestions for developing a comprehensive plan to construct and operate depleted uranium hexafluoride conversion facilities at Portsmouth and Paducah. Could you please tell me when I may expect a response to my recommendations included in that letter?

Answer: The Department has addressed the recommendations contained in Representative Strickland's letter of December 4, 1998, as well as his letter of May 24, 1999, in the Final Plan for Conversion of Depleted Uranium Hexafluoride (July 6, 1999) and in the draft Request for Proposal. The Congressman's suggestions were very helpful to the Department in completing our final plan and issuing a draft Request for Proposal.

Question 7: More specifically, the December 4, 1998 letter includes a recommended approach for transferring the funds under P.L. 105-204.

c. Has the Department made preliminary decisions regarding the transfer of the P.L. 105-204 funds?

d. If so, could you please share them with us. (The letter urged the Department to secure a nondiscretionary funding source by identifying an offset. OMB could help identify the offset and this would avoid an annual appropriations battle to ensure funding.)

Answer: The Department is committed to working to find opportunities this year to secure acceptable funding sources for the depleted uranium hexafluoride conversion project. We expect to work closely with the Ohio and Kentucky delegations on this important issue.

Question 9: One other issue raised in the December 4, 1998 letter is the issue of creating a process for public comment on the draft plan under P.L. 105-204. Will there be a formal process for interested parties to comment on the Plan?

Answer: The *Final Plan for Conversion of Depleted Uranium Hexafluoride* (July 6, 1999) included review and incorporates the comments of interested parties on the plan, including the affected Congressional delegations. There will be additional opportunities to provide input on the project as the Department proceeds with implementation of the milestones contained in the plan. For example, formal public review is underway at present on the initial draft Request for Proposal.

Question 10: I am also aware that the Budget Request includes $5 million to initiate a program to recycle depleted uranium hexafluoride. Could you please explain to us the Department's justification for recommending only $5 million from the larger P.L. 105-204 funds for the upcoming fiscal year?

Answer: The Department's fiscal year 2000 budget request includes $5 million to begin the process of constructing depleted uranium hexafluoride conversion plants. These funds are included in the Uranium Program Budget and are requested for activities related to site-specific National Environmental Policy Act activities and for procurement activities. The Department has also committed to use USEC MOA funding for this purpose. The Department is committed to working closely with the Ohio and Kentucky Congressional delegations to find opportunities this year to secure additional funding for the depleted uranium hexafluoride project.

Memoranda of Agreement—$66 Million

Question 15: On another topic, I mentioned in my opening statement two Memoranda of Agreement established between the Department and USEC making available $66 million for the maintenance and disposition of the depleted uranium hexafluoride stored at the Portsmouth and Paducah sites. I am aware of several proposals presented by the Department for the best way to spend these funds. I am troubled that the emphasis was not placed on job creation. These Agreements stem largely from concerns raised about worker displacement as a result of USEC privatization. Could you assure me that the $66 million will be spent on activities directly related to immediate job creation efforts at Portsmouth and Paducah?

Answer: Of the $66 million in funding the Department received from the United States Enrichment Corporation (USEC), $38.7 million of those funds are earmarked for management of approximately 11,200 cylinders that have or will be received from USEC over the next several years. Another $3.3 million is earmarked for conversion plant procurement activities and for accelerating activities conducted pursuant to the National Environmental Policy Act. We are preserving the remaining $24 million for use as initial funding for the DUF_6 conversion project, or, if it is not needed for that activity, to fund near-term projects at the gaseous diffusion plant sites. All of these activities should. help to increase the number of new jobs created at the Paducah and Portsmouth Sites and mitigate the impact of workers displaced by USEC privatization.

Question 18: One last question on the $66 million. The Community Reuse Organization in southern Ohio has expressed a strong interest in working with the Department to most effectively use these additional funds. Will the Department consult with the Community Reuse Organizations as decisions are made about the allocation of the $66 million?

Answer: We have met with community groups in Ohio and Kentucky and will continue to meet with these groups to discuss the best approach to implement overall projects including their suggestions regarding best use of funds.